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Papers and Studies

More about Value Judgements in Economics: Review of the Book
Economics as Applied Ethics. Value Judgements in Welfare Economics

Report from the Seventh Annual International Conference
The instability we are experiencing in almost every aspect of society worldwide is rooted in the deep global economic crisis, which has been compared to the Great Depression of the 1930s. The waves of the crisis have spread to countries in diverse regions of the world due to their economic interdependence. The depth and scope of the economic problems challenge academics and politicians alike to offer new paradigms and practical solutions. Ironically, this is an opportunity for researchers to come up with new theories and concepts to replace those that are being questioned.

It seems that we are still in the phase of diagnosis and criticism of the current economic systems. The critics’ concerns target not only the financial regulations that are most frequently blamed, but also the well-established growth paradigm. Simon L. Dolan and Mario Raich consider the latter “the basic economic paradigm of unsustainable growth, the mantra of quite probably the last phase of capitalism.” (Dolan, Raich, 2009:122). According to them, the growth paradigm allows only limited periods of growth followed by periods of economic crises and depression. It produces out-of-control consequences. They list many dangers which threaten the very existence of mankind, such as growing world population, widespread poverty, degradation of ecosystems, armed conflicts and terrorist attacks. None of them can be eased by implementation of a growth paradigm. Instead of an economy based on greed and fear, the authors support the idea of “sustainable growth”, the perpetual motion of modern civilization. Applying the sustainable growth idea requires a new lifestyle using less energy and fewer resources. (Dolan, Raich, 2009:122–123). Of course this general idea needs detailed planning and implementation as well as modification of mindsets. The same themes of criticism can be traced in the publications calling for social economy and social responsibility as alternatives to the global anarchy of neoliberalism. Their authors complain of a laissez-faire policy of economic and social isolation of millions of people (Golob, Podnar, Lah, 2008). There are many other causes of instability, such as advances in science and technology. Uncontrolled, they can bring disastrous effects, while applied wisely, they can result in numerous beneficial solutions.
In short, mankind faces numerous fundamental problems. What new institutions are required, what cultural changes need to be implemented, what economic structures should be promoted, what managerial instruments applied? There are many questions that beg for answers. This situation calls for thoughtful research and new concepts in all economic disciplines. Therefore, discussion on various aspects of the current economic unrest continues at major international events, like the Tokyo annual meeting organized by the International Monetary Fund and World Bank Group on Global Challenges and Global Solutions in October 2012 and during numerous local seminars, conferences and meetings.

The Collegium of World Economy International Journal of Management and Economics provides a forum for academic debate on the important economic problems of macroeconomics, microeconomics, finance and management origin that are faced by policy makers, managers and entrepreneurs worldwide. We invite authors to share their research results as well as their conceptual ideas. We would also appreciate essays addressing the methods of contemporary academic research. For this reason we start the current issue with the article “Methodology and Research in Management” by Josep M. Rosanas, who examines the logical and empirical foundations of knowledge (truth). He claims that science must be well founded, i.e. rigorous, while nowadays scientific is taken to mean empirical, and it is mistakenly considered rigorous when statistical methods are used. He also discusses the applicability of knowledge (relevance). His paper is followed by an essay entitled “Authorities and Methodologies: Unmanageable Complexity?”, a commentary on Rosanas’ reasoning by Sławomir Magala. Continuing the discussion on the subject in the next paper, a deep methodological reflection on management research entitled “Rigor versus Relevance: A Pseudo-Dialectical Solution”, Aleksander Sulejewicz argues that the “correct” combination of truth (rigor) and profit (relevance) can only be decided in concrete, historical circumstances. We return to methodology issues at the end of the journal in a book review on “Economics as Applied Ethics: Value Judgements in Welfare Economics” by Bogusław Czarny.

As the Collegium of World Economy research interests include three disciplines – economics, particularly international economics, international finance and management/business administration – we decided to offer an interdisciplinary set of articles to follow the introductory part devoted to methodology. The managerial part, with a focus on successful management practices during turbulent times, starts with the paper “Outcome- and Behavior-Based Performance Assessment of Sales Managers: The Influence of Hierarchical Level” by Rajiv Mehta, Rolph E. Anderson, Takao Ito and Jolanta Mazur. The authors suggest that sales managers are evaluated using both objective and subjective performance appraisal criteria. On the basis of empirical research, they claim that hierarchical level influences performance evaluation of sales managers. The other paper addressing managerial problems concerns the prosumption phenomenon. Dorota Serafin in “Defining Prosumption: Understanding the Nature of Prosumption after the
Emergence of Internet-Based Social Media” notices that the term first used by Toffler has gained significantly in importance as the Internet empowers consumers to become prosumers. She describes examples of companies applying the prosumption concept in their business practices. Finance discipline is treated by the paper “Application of the Call-Put Parity Theorem for Modeling the Value of Implicit Put Options Granted to Shareholders of ‘Too Big to Fail’ Financial Institutions at Taxpayers’ Expense” by Aleksander Mazur. The author touches on the issue of moral hazard related to implicit state guarantees for so-called “too big to fail” financial institutions. Empirical research proves that pledges of state support do not always yield value for equity holders.

International economics topics are discussed in three papers. In the first, “Is EU Services Markets Integration Progressing? Analyzing EU Trade in Services through Commercial Presence”, Alina Szypulewska-Porczyńska describes the trade in services in the EU context. She suggests that liberalization within the EU internal market is not a dominant factor in determining “Mode 3” patterns. The second article, “The Significance of Small and Medium Enterprises in the Russian, Polish and British Economies” by Kamil Pikula, indicates the different roles played by SMEs in these three countries. The last paper, “Interacting Labor Market Institutions: Evidence from the EU-27”, was submitted by Aart-Jan Riekhof. The article includes a theoretical elaboration on the interaction of labor market institutions and some empirical findings suggesting its existence across labor markets of the EU-27.

I hope that this blend of articles will encourage further discussion on the problems mentioned in the current publication and on many other important issues the world economy is facing.

References


Science, usefulness and methodology

To say that the goal of research is to produce scientific knowledge seems uncontroversial enough. And yet, we need to define what we mean by scientific knowledge, as confusion is rife. Ever since the end of the 18th century, science has proven enormously successful in improving people’s physical living conditions. As a result, its standing has risen to the point where the strongest argument in favor of almost any proposition nowadays is that it is “scientific”. If something is “scientific”, then it is “good”; and if something is “good”, then it must be “scientific”.

It is easy enough to demonstrate the absurdity of such reasoning, but the fact is that people often mistakenly assume that “scientific” equals “good” in the sense of “useful”. As we shall see later, it would be naïve to expect science to be immediately applicable. In a business school, it should be equally obvious, however, that a good deal of the knowledge that is useful to managers is not in the least scientific. Managers need to know the particular circumstances of the market in which they work, who’s who in that market, where the opportunities lie, which of the employees’ skills are unique and should be nurtured, etc. This is not something a person learns in school, but in daily contact with the world of the company or institution concerned.

Curiously, while science is overrated as a source of useful information, and useful information is overrated as regards its scientific credentials, the general public has come to somewhat distrust scientists. Only 50 years ago, the authority of an expert in any given area was unlikely to be questioned. Authority was somehow taken for granted. Since the protest era of the 1960s and 1970s, however, respect for experts in any field has declined considerably. In part, that may be because the general public has had its fingers burned, having earlier trusted expert opinion on certain matters (U.S. citizens learned to distrust what experts told them about Vietnam in the mid-’60s, for example). In part, it may be because society has become more complex, making it increasingly difficult to tell a “real” authority from a self-proclaimed expert, particularly in today’s more sophisticated professions.
Sowell [1980] illustrates this last point with a very graphic example. It is very easy to find out whether a man knows how to milk a cow: you give him a cow and a bucket, and if the bucket comes back full, he knows; if not, he doesn’t. In contrast, if a person claims to be good at designing marketing plans, there is no similar, obvious way to test his claim. Waiting to see what happens is not usually an option: you generally want to know before the plan is put into effect. What’s more, it is impossible to measure the results without a degree of ambiguity or arbitrariness. That is why peer opinion is often the only test we have.

So here we have a first criterion for deciding whether a thing is scientific or not: a thing is scientific if scientists agree that it is. Yet, while this may be a good criterion for judging a particular piece of research, it is still worth asking what makes one statement scientific while another is not. That is where methodology comes in.

According to Christenson [1983], most researchers today (he is concerned about researchers in the field of accounting, but the observation applies to practically any other field) have a thorough grounding in research methods, but practically none in methodology. Making a plea for sanity in the use of language, Machlup [1963] explains the distinction between methods and methodology:

“Is it necessary that semiliterates get away with their misuse of words, and that through sheer repetition the misuse becomes respectable and legitimate by virtue of the authority of a new edition of Webster? Methodology, in the sense in which literate people use the word, is a branch of philosophy, or logic, though some logicians prefer to regard logic as part of methodology. Semiliterates adopt the word when they are concerned with neither philosophy or logic, but simply with ‘methods’. Instead of ‘statistical techniques’, they would say ‘statistical methodology’, and instead of ‘research methods’, they love to say ‘research methodology’. They do not understand that the same method may be justified on very different methodological grounds, and that from the same methodological position one may defend very different methods of research.”

Thus, methodology is useful because it allows us to reflect on the foundations of our statements about the world.

Aristotle was probably the first person to give a definition of science and establish the conditions under which knowledge may be said to be scientific. In Book I of his Posterior Analytics, he says that “… by demonstration I mean a syllogism productive of scientific knowledge, a syllogism, that is, the grasp of which is eo ipso such knowledge”. Not all knowledge can be based on reasoning (syllogism), as knowledge requires premises that are “true, primary, immediate, better known than and prior to the conclusion. Syllogism there may indeed be without these conditions, but such syllogism, not being productive of scientific knowledge, will not be demonstration”. Somehow, then, Aristotle’s basic criterion is this: science is everything that can be demonstrated (with reasoning) from initial truths which need no demonstration because they are self-evident.
Implicitly or explicitly, this has remained the most widely accepted definition for centuries, leading to an unjustified bias in favor of analytic propositions and supposed absolute certainties that Aristotle probably would not have liked. Thus, Descartes thought that any knowledge that can be questioned should not be called science, and an 18th century English encyclopedia declared that “science is a clear and certain knowledge of anything, founded in evident principles or demonstration” [Chambers, 1738]. Kant was less categorical; he saw that, alongside science properly speaking, which contained propositions that cannot be refuted, we have to include any other body of knowledge systematized according to certain principles.

Empiricism and positivism changed this situation, with their insistence (worthy of a better cause, let it be said) on the observability and empirical verifiability of any statement that claims scientific status. This brought about a cultural change in the abovementioned bias. While for many years it seemed as if any statement that was not deductive was not scientific, now almost the reverse is the accepted truth: anything that does not have an immediate empirical referent is unscientific. It goes without saying that neither of the two biases has a sound basis. It was clear even in Aristotle’s original conception that all science must have both a formal (deductive) structure and an empirical basis; and that both must be well founded, that is to say, rigorous. Sadly, “scientific” nowadays is often taken to mean “empirical”, while “rigor” is thought to come from the use of statistical methods when, in fact, the way the discipline of statistics is used nowadays is often far from scientific, methodologically speaking. At the same time, the obsession with the observability or verifiability of conceptual constructs can all too easily lead to disdain for potentially useful concepts and constructs. This has happened even in physics¹, while Godfrey and Hill [1995] have recently shown how this happens in the field of strategic management too.

Rigor, defined in the Webster’s Dictionary as “scrupulous or inflexible accuracy or adherence”, is what gives a statement the right to be considered scientific. In recent years, mainly in the context of economics, there has been a debate about “rigor versus relevance”, as if there were necessarily a tradeoff between the two. This debate is clearly misguided. As Bunge [1988] says,

“Science is useful: because it seeks the truth, science is effective at providing tools for good and evil. Ordinary knowledge usually concerns itself with obtaining results that can be applied immediately: as a result, it is not sufficiently true, which means it cannot be sufficiently effective. Given a true knowledge of things, it is possible to manipulate them successfully. Science is useful because it is objective: without actually aiming for applicable results, science does in fact provide them, sooner or later. … Therefore, urging scientists to produce applicable knowledge is redundant: they cannot do otherwise. It is the job of technicians to put scientific knowledge to practical use, and it is the job of politicians to ensure that science and technology are used for the benefit of humanity.”
What could be more “relevant” than astrology? It concerns our health, our success in
business, our safety while traveling, and our relationships. These are all vitally important
matters in a person’s life. The only problem is that there is no good reason to believe
what astrology tells us. Astrology has no foundation, no “rigor”, though that did not
stop a president of the United States, Ronald Reagan, from having an astrologer on his
payroll.

Herbert Simon [1979], in his acceptance speech for the Nobel Prize, put it differently:

“It is a vulgar fallacy to suppose that scientific inquiry cannot be fundamental if it threat-
ens to be useful, or if it arises in response to problems posed by the everyday world. … There
is, however, a converse fallacy that deserves equal condemnation: the fallacy of supposing that
fundamental inquiry is worth pursuing only if the relevance to questions of policy is immedi-
ate and obvious.”

Science and truth

There are many misconceptions about science, perhaps the most common being
that some theories are false while others are true, when in fact “true” and “false” are not
adjectives that can be applied to scientific theories.

Scientific theories are often compared to maps (see, e.g., Polanyi, 1958; Christenson,
1980). A map can be said to be a “theory” of the terrain it is intended to represent. It
is not difficult to see that a map can never be “true” in any sense. All maps are to some
extent false, as there are always details of the terrain that they do not show. Maps may
or may not be useful for finding one’s way around, but in no way are they a “realistic”
representation of the world. The only possible “realistic” representation would be a per-
fected duplicate of the original, on exactly the same scale and with the same features and
details. Obviously, that would make it perfectly useless as a map. A map is useful
precisely because it is a simplification of the terrain it represents (much smaller, flat
rather than rugged, brightly colored unlike the original, etc.), one that we can use to see
where we are and where we are going.² It cannot and should not reproduce the original
in every last detail. It merely needs to show what is relevant for the purpose at hand.
A road map needs to show the roads and the towns, but not necessarily the landforms;
in contrast, the landforms will be crucial to an engineer planning a road; he will need
a very different kind of map from a motorist.

Science must abstract from reality. That means concentrating on particular vari-
nables, namely the ones that are judged relevant to the type of problem at hand, and
omitting the rest. That is why science is never “realistic”. The most successful scientific
theory ever produced, Newton’s mechanics, starts from three axioms that are not at all
realistic, and are even somewhat counterintuitive (the principle of inertia, f = ma, and
the principle of action and reaction). This is not to say, however, that science doesn't have to respect some rules regarding its hypotheses. As in map making, there are certain rules that must be respected if we want the maps to be useful and relatively complete.

**Naïve inductivism**

A very common view of science is that it starts from unbiased observation of facts and then generalizes, by induction, to formulate universal laws about those facts, which in a subsequent step are generalized to build theories of a more general nature. The laws and the theories are then verified by comparing their empirical consequences with reality, including the initial observations. According to Mark Blaug [1980], this view, which (following Chalmers, 1976) we shall call “naïve inductivism”, was the standard view of the philosophy of science in the mid-19th century. And yet, as early as the end of the 18th century, Kant and Hume had shown that this conception did not hold water. It is a sad fact of human nature that a point of view can survive (and not only until the mid-19th century, but on into the late 20th, albeit less widespread) even after someone has shown how ill-founded it is.

Let us show why its foundations are so shaky. Essentially, it boils down to the fact that none of the three premises of naïve inductivism (that science starts from observation, that it generalizes by induction, and that it then verifies) rests on a solid foundation.

We start with the first premise, which says that science starts from observation and that observation is a solid base from which to derive scientific knowledge. A historical anecdote will illustrate this point. The anecdote concerns Galileo’s first observations of the planet Jupiter and its system of satellites, using his recently invented telescope. For Galileo, the satellites were real; his opponents, however, had serious doubts, and some even maintained that the satellites were “produced” by the telescope, which instilled more skepticism than confidence. They could not see what Galileo saw (through what were admittedly very rudimentary and unwieldy telescopes). In a way, they had the same difficulty seeing what we now consider obvious as any untrained person would have seeing what a trained radiologist can see in an X-ray. What for some was a fact, for others did not exist. Galileo himself, on discovering the rings of Saturn, went from initial incredulity to thinking that God was playing a joke on him, before he finally “saw” what we take today as “proven”. In other words, in order to be able to look through a telescope and take what we see as an observation, we need to have and accept a certain theory of optics and telescopes, just as seeing the “facts” that appear in an X-ray requires a certain training (that is, a whole theory) about what X-ray machines do.
Kant [1964] expressed this idea in general terms in the “Critique of Pure Reason”:

“There can be no doubt that all our knowledge begins with experience… but it does not follow that it all arises out of experience … for it may well be that even our empirical knowledge is made up of what we receive through impressions and of what our own faculty of knowledge (sensible impressions serving merely as the occasion) supplies from itself. If our faculty of knowledge makes any such addition, it may be that we are not in a position to distinguish it from the raw material, until with long practice of attention we have become skilled in separating it.”

The second premise is that science can use particular cases to formulate a general law. This has even less foundation than the previous one, as Hume [1874] showed a few years before Kant. The fact is that the principle of induction can have only two types of foundation: logical-deductive, or empirical-inductive. The logical-deductive option can be ruled out immediately, as only strong or complete induction, as used in mathematics, is acceptable. The empirical-inductive option, on the other hand, would require using precisely the principle we want to prove. That is, if we justify it by arguing that the principle of induction has been used on some occasions and has worked, we are taking for granted that it will always work, which obviously is not a solid foundation.

Russell [1959] illustrates this point with the story of the inductivist chicken. A chicken on a farm observes that the farmer appears at 8 a.m. on the dot every day to scatter some corn for him and his feathered friends. Having made a large number of such observations, the inductivist chicken decides he can generalize that the farmer will come every day at 8 a.m. to feed them. Since he has seen this happen every day since he was born, his hypothesis has been confirmed in 100% of cases. One day, he realizes there is a hole in the wire and thinks he might go out and see the world. But when he checks his watch, he sees it’s five to eight, and decides to wait for the farmer to come and feed him first. But alas! It is December 24, and when the farmer comes, it is not to feed the chicken, but to wring his neck.

Russell notes that the chicken would have benefited from a more refined view of the uniformities of nature. That is, unless we understand why there is a certain constancy (or, to put it in terms more appropriate to management, unless we know the farmer’s decision model), merely to know that he appears every day and scatters chicken feed is to know very little. And such slight knowledge may even be dangerous. Obviously, if that is all the information we have, it may be rational to use it; but we should be aware of how unreliable it is, even though it has been confirmed in 100% of cases.

Hence the Popperian rule of falsification, sadly ignored by many management researchers, as Christenson [1983] has clearly shown. To falsify is to try to disprove a hypothesis; it is done simply by presenting a counter-example (that is, an example that contradicts the theory). If a hypothesis is reasonable (only reasonable hypotheses advance our knowledge), falsifying it (which is logically possible) tends to be rather difficult, whereas “confirming” it (which is logically impossible) is extraordinarily easy, if by “confirm” we simply mean to add more examples of what the hypothesis assumes. It was extremely easy
for the inductivist chicken to add more and more data that “confirmed” his hypothesis (data accumulated automatically with every day that went by). But he would have found it substantially more difficult (he would have needed to change his system of observation, we might say) to add data that rejected the hypothesis. Yet that is precisely what would have been most useful to him.

A much less anecdotal illustration of the same issue is to be found in the development of astrology. The Egyptians actually knew quite a lot about astronomy. They had found an empirical relationship between the early morning appearance, just before sunrise, of the star Sirius (the brightest object in the firmament, apart from the Moon and a few planets) and the annual flooding of the Nile, on which their agriculture depended. Basically, a few days after Sirius appeared, the water levels would start to rise and the bountiful floods would begin. I do not know whether they actually established the causal link between the two phenomena (Sirius appeared at the beginning of summer, which is when the ice and snow on the mountains in Central Africa melts, feeding the Nile), but the inductivist reasoning that gave credibility to astrology is in any case easy to imagine. If the appearance of Sirius can predict an important event such as the flooding on which an entire people depends for its food, how can the stars not be able to predict trivialities such as the character of an individual, or his success in love? Throw in a few inaccuracies (the floods were obviously not predicted entirely accurately, given the unpredictability of seasonal temperatures) and already we have an excuse to believe practically anything that comes from the stars.

Sensible people know that astrology has no foundation. Counter-examples are easy to find for any of its propositions, even allowing for variations and inaccuracies. But it is important to bear in mind that very many people still read horoscopes regularly. Most newspapers, magazines and television channels (even the “serious” ones) publish them. Some astrologists have even become quite famous and presumably make a decent living out of it. If the criterion for scientific status were the amount of money a discipline attracts, astrology would come off quite well.

The third principle of naïve inductivism is the belief that, once formulated, theories can be verified. From the above analysis of induction it follows that, as a general rule, verification is impossible as it would mean, once again, accepting the principle of induction. Popper’s condition for something to be accepted as knowledge of reality (always provisional and capable of improvement) is that it be falsifiable, and that “serious” attempts to falsify it have failed.

**Other naïve conceptions**

Besides naïve inductivism (or naïve empiricism, as he calls it), Christenson identifies two other naïve conceptions that are common in the world of management: naïve pragmatism and naïve rationalism.
Naïve pragmatism is the excessive haste to obtain applicable results, and the conviction that the sooner the results are put to use, the better. Christenson agrees with Pareto that this obsession with premature practical applications hinders the progress of science, as does the insistence on telling people what they should do instead of observing what they actually do. And he adds that, obviously, observing what people do without a theoretical structure as a basis is naïve inductivism.

Lastly, naïve rationalism consists of thinking that the aim is to explain known phenomena, when that goal has not been achieved even in the natural sciences. Sophisticated rationalism, by contrast, considers the observed state of the world as only one of a number of possible states, and aims to discover the complete set of possible states and their logical relations, that is, the logical structure of the set of possible worlds.

**What should research in management be like?**

So far, I have tried to indicate some of the conditioning factors of “good” research. However, I recognize that I have been more negative than positive, in the sense that I have spent more time talking about what not to do than what to do. That is quite deliberate, of course. There are two very good reasons for it.

First, it is much easier in this area to say what is to be avoided than to recommend immediate courses of action. If research is essentially about generating ideas, knowing what needs to be done is almost as good as having done it; the initial idea is always the most difficult part. In certain fields of research, doctoral students sometimes take longer to find a suitable subject for their thesis than to actually develop it. Finding what to research and how is an integral part of the researcher’s task. In research, there are no easy recipes, though there are certainly dangers to be avoided.

Secondly, real research is something that must come from each individual researcher. One should “let the spirit blow”. Imposing a method, or even a subject, tends to be counterproductive. People are only capable of researching what interests them. I remember having read somewhere in Samuelson that in his youth he undertook an empirical research project; but when he found that the result of his efforts was that the marginal propensity to consumption was negative, he resolved never again to devote himself to this type of research. When I read it, I wasn’t sure whether it was serious or a joke, but in any case it makes no difference. Asking Samuelson to carry out empirical research is probably asking the impossible, although he is undoubtedly one of the (if not the) least questionable Nobel Economics laureates ever.

Nevertheless, there are some positive things that can be said, though undoubtedly we have to be more cautious. That is what I shall attempt to do in what follows, somewhat changing the tone to become more direct and personal and less academic.
First, we need to consider the purpose of research. Broadly speaking, research has two possible results: one is long term and uncertain, while the other is short term and certain. The first one is the result of the research itself. Sometimes there is a result, and sometimes there isn’t. Sometimes it is important, and sometimes it isn’t. And if it is important, it always comes after many years’ work. The second, more short-term and more certain result is that research (if it is “good”) improves the researchers themselves. It makes them think about their subject at a non-elementary level, it brings them into contact with critical colleagues, it makes them aware of their limitations, it encourages them to formulate their ideas more clearly, and it helps them to be more precise. First, they must discover for themselves what others have already discovered before them (reading what others have thought is not the same as re-thinking it yourself). And second, they must realize how difficult it is to keep walking when there is no road, when the road is made by walking. The humility to accept that our “brilliant” new idea is one that many others have had before us is something we acquire only by systematically putting things down in writing and showing them to someone else. It would be a serious mistake to think that of the two purposes of research just stated, the first is the most important. On the contrary, the second is more important than the first. If human progress is not as fast as it might be, it will simply have to be slower. That is nothing to worry about. What is important, however, is that every academic behaves professionally, and that consists essentially in keeping abreast of what everybody else thinks. And there is only one way to do that: to be forced to write down what one thinks, in a structured manner.

Obviously, that is a very demanding task. One of the basic reasons for learning is to satisfy demands. The international academic community has its standards, and the formal requirements are laborious. In an article on organizational research in Europe and America, Koza and Thoenig [1995] caricatured the image that many American researchers had of their European counterparts:

“For some US scholars, the profile of an average European researcher is of an individual who is not rigorous, wasting time with general ideas and unable to deliver cumulative knowledge outside very complex monographic studies. … The lack of tenure pressure on the continent is responsible for parochial training and poor scholarship which could not pass traditional peer review.”

This situation has changed a lot in the past few years, and Europe has adopted the American ways to a great extent. But Koza and Thoenig also presented the other side of the coin, and from there we might be able to reach some synthesis. In effect, they said that the European cliché is that US research is somewhat immature, due to the pressure for tenure, and that it suffers from the worst perversions of “normal science”! This is probably true on the whole. That is precisely why we need to pay attention to methodology, which is the reason for the first part of this paper.
Unfortunately, in the last decades, supposedly rigorous research has lost a lot of relevance and the “perversions of normal science” have become worse, to the extent that Haack [1998] points out that nowadays researchers are often “fake researchers” or “sham researchers”. The fake researcher “is not primarily concerned to find out how things really are, but to advance himself by making a case for some proposition to the truth-value of which he is indifferent” – which is likely to happen given the incentive system that is applied to research (“publish or perish”). And the sham researcher is not “primarily concerned with finding out how things really are, but to make a case for some immovably held preconceived belief”.

Ghoshal [2005], in a well-known posthumous article, accused “bad management theories” of “destroying good management practices”. “Bad management theories” are those that are based on supposed rigor (good methods, perhaps), but on bad methodology: “the pretense of knowledge” [Hayek, 1989] of quantitative-econometric studies on the one hand, and the pessimistic view of human nature that implies that people are guided only by their self-interest on the other. This is bound together with the fact that the conventional academic research results are often unrelated to the “folk wisdom” that real-world managers are interested in for executive education [Pearce, 2004].

Thus, to make real progress in research, we would need an approach that is based on better methodology, one that cannot be qualified for instance as naïve empiricism, which is probably the problem that occurs most often. A mix of rationality, empiricism, and pragmatism is needed. In a nutshell, research should have, on the one hand, the standards of scholarship demanded in the United States, and on the other, the solid methodological foundations that American research sometimes lacks.

Notes

1 In the late 19th century, some physicists, adhering to positivist principles, refused to accept the existence of subatomic particles, as they were not directly observable and were not available to immediate experience.

2 This statement is not to be confused with the very well known statement by Milton Friedman [1953]. Friedman says that the less realistic a theory’s “assumptions” are, the better the theory; thereby espousing an instrumentalist position quite alien to the position of this author. What I argue here is that a theory cannot (and need not) take all the details of reality into account. Unlike Friedman, however, I contend that the closer a theory comes to including all the variables that are relevant to the type of problems it is supposed to resolve, the better it will be.
It is a remarkable fact that this hypothesis is still useful today, even though we know that it is not a good approximation to reality under certain circumstances (specifically, at very high speeds).

I assume they are referring to “normal science” in the Kuhnian sense.

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Abstract

The paper attempts to derive the conditions for obtaining good research in the field of management from a methodological point of view, i.e., from the point of view of the logical and empirical foundations of knowledge and the reasons to believe in the truth of any purported “scientific” proposition. After reviewing the essential concepts coming from classical philosophy and recent philosophy of science, the paper tries to apply them to management research. The paper draws heavily from the work of Charles Christenson (1976, Proposals for a Program of Empirical Research into the Properties of Triangles, Decision Sciences, 7, 631–648; and 1983, The Methodology of Positive Accounting, The Accounting Review, LVIII No.1, 1–22).

Keywords: Research methodology, logic of research, philosophy of science, management research
The present essay is a response to Josep M. Rosanas’ occasional paper on methodology and research in management that examines the logical and empirical foundations of knowledge. The author teaches accounting and control at IESE, the Barcelona-based school of management, sharing the same upscale residential hill with its major rival ES-ADg in competing for the title of the best Spanish business school. This ambitious examination lists as the keywords research methodology, logic of research, philosophy of science and management research.

Let us begin with the logic of research and the philosophy of science. The latter is the area in which the authority of science is examined and various attempts to conduct research are organized. The philosophy of science has been a very robust and popular branch of academic inquiries – at least until recently. It peaked around the Popper-Kuhn debate (in the early 1970s) and gradually lost the struggle for mainstream attention of research communities. Thomas Kuhn unwittingly contributed towards making it irrelevant by legitimizing the struggles between generational cohorts fighting for power, money and recognition in academic communities. Kuhn was no hippie, and yet he had made the flower-power countercultural movements legitimate. He barely made it into Harvard (he was repeatedly rejected by his peers, but pushed by politically minded academic managers), but once he got there, his influence soared. There are many reasons for the relatively rapid decline of the status of philosophy of science. Most of them are linked to the specialization and subdivisions of the domains of inquiry and the shift of focus from physics to molecular biology and medical genetics in attracting new talent, but Kuhn certainly provided prefabs for the postmodernist scaffoldings around the cathedral of knowledge.

The logic of research in 2012 is what philosophers of science and the researchers themselves reconstruct and prescribe as desirable and legitimate procedures aimed at the production of scientifically validated knowledge. Research methodology is the flesh around the skeleton of the logic of research, and management as in management research
is the area, a specific domain of inquiry, namely *management, managing*, which basically means organizing and coordinating within complex and very different organizations, usually formal professional bureaucracies (universities, research laboratories, joint projects, but also business corporations, family firms, symphonic orchestras, semi-legal networks and standing armies).

Rosanas clearly understands that there has been remarkable progress in academic bureaucratization and its ideological counterpart, a standardization of research methodologies. Together, bureaucratization and ideologization may threaten and undermine the expected relevance of research results by strict control of creativity along with organized blindness and learned ignorance.

He begins his essay with the remark that “a good deal of the knowledge that is useful to managers - is not in the least scientific” (“in the least” is an exaggeration). However, he then starts wondering about the origins of the decline in authority, which used to be taken for granted, and he surprises the reader with the following statement:

> “Curiously, while science is overrated as a source of useful information, and useful information is overrated as regards scientific credentials, the general public has come to somewhat distrust scientists.”

What I find curious about the above remark is the word “curiously”. If the general public is exposed to a critical view of every branch of human activity – medical health care, religious spirituality, or scientific knowledge production – and if the general public comes to believe that science is overrated as a supplier of relevant (useful) information, then why would it be so curious that the authority of scientists is being questioned? If, as Rosanas suggests, truly relevant (useful) information is less dependent on scientific credentials than we originally were led to believe, then why wonder that the general public thinks less highly of scientific credentials and is more likely to check them rather than blindly obey and accept?

Thus I would have replaced the word “Curiously” with “No wonder that”. But this is a rhetorical point. The arguments I have in mind are not sheer rhetoric. The decline of scientific authority is both a decline in authority in general and a decline in status of scientficity. Rosanas mentions two reasons for this decline of the authority of scientific enterprise in the eyes of the beholders who pay taxes and finance the salaries of most academic researchers.

The first is historical. The world-wide protests of the ‘60s and ‘70s are explicitly mentioned as the direct cause for the decline of social authority of experts. Rosanas does not go deeper into this argument, which basically rests on a critical distrust towards the scientific-military-cultural mobilization of the Cold War establishment. Distrust was curbed when aggressive Soviet policies justified defense of the “free world”. Curbing became difficult after the decline of a direct Soviet nuclear threat. The Cuban missile crisis
was won by Kennedy and Soviet nuclear missiles were not installed in Havana. Seven years later, US astronauts landed on the moon and the Russians have been unable to duplicate this achievement.

The second is political. Rosanas mentions the failure of the US think tanks of experts to predict the disastrous course of the war in Vietnam. It is true that “the best and the brightest” minds of McNamara, fresh from MIT, Harvard, Stanford and CalTech, could not foresee the willingness of the North Vietnamese communist party to sacrifice hundreds of thousands of soldiers and civilians, nor the power of the US media to lower domestic support for the military actions, thus paving the way for the communist conquest of South Vietnam. Nobody could.

The third is social. He blames the increasing complexity of our societies for the growing difficulty in distinguishing between “real” authorities and “self-proclaimed experts” that are encountered “in today’s more sophisticated professions”.

I am not certain if I understand this last point very well: what exactly is meant by the growth of sophistication in professionalization? The way I understand it, contemporary professions are more sophisticated than earlier ones because they are increasingly more standardized and managed by academic bureaucracies legitimized by merit, hence by meritocracies. Huge systems of ranking and accreditation, of certifying and diploma-granting, of recognition and acknowledgment are built into the very fabric of the daily life of members of research communities. Therefore the example of Sowell’s milkmaid or milkman does not sound very convincing to me. The problem is not with the supposedly direct proof of the pudding in the eating and indirect proof of the design and plan to milk in future within a large organization. The difference between the empirical test of knowledge of a milkmaid or of a marketing manager is not a difference of an individual result of a single act of direct participant observation as opposed to a complex and collective effort. In evaluating a milkmaid, neither are we driving to the farm; we rely on statistics, on delivery quotas and dates, on lab tests of milk quality, on brand popularity if she is selling her milk, etc. In both cases we are evaluating indirect numbers computed and prepared by many sophisticated intermediaries in a complex and collective effort. Methodology comes in as a constitutional tribunal of cognitive justice in both cases. And in both cases, this methodology is bound to reflect our reflections on the way things are (ontology), the way we get to know them (epistemology) and the way we decide to prefer some over others (axiology, both as ethics and as aesthetics).

The philosophy of science does not have to start with Aristotle, but it may well do so. Aristotle did notice that we have to start with some theoretical assumptions and then to follow them with rigorous empirical research. It is a long way from an ontology visualizing the world as a storage hall of objects linked by various relations to one another (and to ourselves) to the ontology of, say, “eventism”, visualizing everything as a huge stream of multidimensional events (to use Whitehead’s brave attempt to draw conclusions from quantum physics in general and relativity theory in particular). But ontology is usually
the least of the methodological worries of academic researchers. These concerns are usually solidly entrenched on two fronts: epistemological and axiological. Rosanas visits the epistemological trenches. He talks of scientific theories, comparing them to maps (quoting Polanyi and Christenson) and allows for pragmatic omissions (no need to reproduce more than needed for navigation at hand). He talks of the need to operate with abstract concepts rather than concrete ones, for reasons of efficiency and generalizability. True enough – but not sophisticated enough. The main reason we are talking about actionable knowledge as if it was a map of reality is not that Polanyi or anybody else used to do so, but because we have already industrialized the transformation of information into abstract maps with the help of computers and telecommunications. The battles in information space (if I may use the term coined by the late Max Boisot) are about search engines, networking rules and communicative socialization of the new generations. Hume and Kant and Russell may be quoted at length, but the quotes and respect for their skeptical attempts to build the sound scaffolding for all future builders of knowledge does not change the fact that today we are more into an inter-subjective mood of post-Popperians (e viva Wikipedia) and post-Kuhnians (e viva tenured tracks in academic competition) than into either the tradition of pure skepticism (Hume) or solid stage design for any drama a knowledge pursuing mind might write (Kant).

I agree, however, with my Spanish colleague, that a sophisticated view of knowledge production (say, a non-naïve philosophy of science) may presuppose an attempt to “discover the complete set of possible states and their logical relations, that is, the logical structure of the set of possible worlds”. May, but does not have to. What emerges are often non-hierarchic and extremely transparent networks, projects and – yes – structures. Wikileaks are anti-hierarchic and to hell with complete sets of possible states. Of course, I cannot but agree with him that in order to apply epistemological intuitions to management research one has to “become more direct and personal”, though I do not share his belief that this necessarily makes me less academic. Margaret Archer did not become less academic when dealing with self-reflection and complex embedding and shifts of actionable knowledge of self-transforming agents. Why would it have to be so? Being personal and self-reflective and building my critical self-reflection into the very fabric of my methodological awareness, I do not deviate from the course of a true professional in the academic research community. Au contraire, I should stay on this side of the Pyrenees.

Rosanas expresses a belief that we should, as members of a research community in good standing, “keep abreast of what everybody else thinks”. This is true; we should know what our peers are doing when trying to answer the questions, which trouble and perplex us as well. However, it is not enough to simply write down what we think in a structured manner and let it float through the communication and information space. The problem is that our communication and information space becomes a very crowded and very subdividing universe full of black holes and feudal fiefs. Delivering cumulative knowledge, which, according to Koza and Thoenig (whom Rosanas quotes approvingly),
is what the European researchers viewed from the US perspective are unable to do, de-
pends crucially on organizing and managing research, implementation, marketization
and streamlining of public-private-creative networks and projects (Richard Whitley had
once tried to see if he can come up with national recipes for a successful mix of basic
research, applied projects and market products and services). Perhaps a solution will
emerge from our recent experiences with very large scale giga-networks and mega-com-
plex projects like growing and transforming bunches of experiments linked to the large
hadron collider run by CERN deep under Geneva, Switzerland.

The first empirical studies of these research processes are already emerging (one
of them co-edited and co-authored by the late Max Boisot) and we should pay close
attention to them. The real test of the European Union is not only the management of
a fiscal crisis and the bailing out of Greece or prevention of a bankruptcy of Spain and
Italy. It depends also, and perhaps much more so in the longer run, on the organizing
and managing skills of our complex and heterogeneous elites enlisting researchers, man-
gers, politicians, PR and media specialists and other professionals, who can persuade
tax-paying citizens that in spite of diminishing authority, it is still worth our while to
finance basic research in hope that someday more GPS navigation, mobile phones and
tablet computers will make our life easier, better, more in line with the ideals of a cre-
ative enrichment of socialization patterns. Let’s hope so. In fact, some hopeful signs
can already be detected. The extreme populism of the new right wing parties has not
scored a sustainable success in re-shaping the European public opinion. The attempts to
understand new forms of political participation, which might change the unfortunate
image of the EU integration as a plot of the elites against the masses, are already acquir-
ing a form of a new activism against exclusion from the tele-communicational clouds
of the web (ACTA) or of the emergent concepts of “sustainable technological citizen-
ship” (cf. Valkenburg, 2012, Sassen, 2012). Academic professionals, who had often in the
past evolved into the first-rate public intellectuals (Erasmus, Voltaire, Chomsky) do have
their chance. Especially when they write that: “euroscepticism is part of the democra-
tization of the EU. It results from the uncertainty about the quality and scope of the EU
polity and the fuzziness of the underlying demos” (de Wilde, Trenz, 2012).

Academic science can progress in making us understand the world better and in
bending it to serve our needs better by a managed reinventing of itself. Rosanas calls
for this reinvention, when he urges us, academic professionals, to keep abreast of what
non-academics and non-professionals think. Steve Jobs had once said that he is not in-
terested in marketing research: he wants to invent something that all people will want
to have, although they still have no idea that this is what they will want in future (and
so asking them about it by marketing researchers makes no sense). Same holds true
with respect to our new forms of managing our political affairs (EU as polity) and of
the emergent forms of sustainable solidarities (demos, or the citizens of the EU member
states). A democratic community emerges and acquires a voice due to democratization,
which also has which need to be reinvented all the time. Reinventing itself, democratic communities make choices and decide, often on the basis of insufficient evidence, who is to be followed as an expert and who is to be distrusted as a non-reliable manipulator. Academic professionals are not the best and the brightest all the time, but we can extend organized skepticism of our cold laboratories and calculated polemics to the hotbeds of pent up emotions, heated sentiments and baroque rhetoric of the real life politics. Rigor and relevance in an approximate balance. Yes, we can. Moreover, we should.

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**Rigor versus Relevance:**  
A Pseudo-Dialectical Solution

**Introduction**

Almost since the beginning of managerial education, institutionalized about a century ago in the form of a “business school”, we have witnessed discussions among teachers on what is and what should be the object of research and teaching and on the methods of implementing good, better and best practices in the domain. Every few decades, and increasingly frequently lately, there arises a “bubble” of academic quarrels. These become an institution themselves, filling the space of yet another academic journal with a forum, debate, or session on teaching theory and practice and application of theory and practice in management. One of the recurrent themes of such an informal institution is “Rigor and Relevance” (copied into other languages as “rigor y relevancia”, “pertinence et rigueur”, “rigore e relevanza” and somewhat descriptively as “высокие научные стандарты и ориентация на практическое применение знаний” or “trade-off zwischen theoretischer Stringenz und Praxisrelevanz”). In the present paper, we shall sketch out one attempt to solve the dilemma of “rigor and relevance”. Our attention is directed to Freek Vermeulen, professor of the London Business School, whose two articles published by Academy of Management Journal will serve as the basis for reflection and critique.

**The “rigor and relevance” dilemma in the production of management knowledge**

“Legitimation crisis” of business schools. Ever since the beginning of management education, institutionalized about a century ago in the form of a “business school”, we have witnessed discussions among teachers on what is and what should be the object of research and teaching and on the methods of implementing good, better, and best practices in the domain. Every few decades, and increasingly frequently lately, there arises a “bubble” of academic quarrels. These become an institution themselves, filling the space of yet another academic journal with a forum, debate, or session on teaching
theory and practice and application of theory and practice in management. Given the overwhelming compression of time, the regularity with which esteemed bodies organize brainstorming sessions, edit special issues of highly ranked journals and offer their columns to “breakthrough” papers and keynote speeches is astonishing. After the event, new *bon mots* and attractive quotations appear, bibliographies accompanying articles become longer, and awareness increases of a gap, chasm or divide between research, science and the practice of economic life.

Such literature becomes part of a still wider *problématique* of disappointment that business schools generate, either in general or as an aftermath of regular crises observed in contemporary capitalism since the mid-1970s, e.g. the Enron collapse or the global financial crisis. Recently, the press headlines read: “Financial Crisis: Blame B-schools” [BusinessWeek 2008] and asked “Are business schools to blame for the credit crisis?” [The Independent 2009]. Joel Podolny in his HBS blog was unequivocal: “Are Business Schools to Blame? Yes!” [HBS blog 2009], and gave three reasons for the loss of social trust:

1. The traditional MBA curriculum has divided the challenges of management and leadership in a dysfunctional way.
2. Business schools communicate the idea that would-be applicants must measure the MBA degree’s benefit in terms of the additional salary they can earn and do not highlight the fact that it is a professional degree that imposes responsibility and accountability on its holders.
3. There has been little contrition on the part of those involved in MBA education after the crisis. Achievements of its graduates – Yes! But responsibility for the harm their graduates do to society – No!

One gets the impression that titles such as “The business school in ruins?”, “Are business schools failing the world?”, “The End of Business Schools? Less Success Than Meets the Eye”, “What if the Academy actually mattered?”, and “How business schools lost their way” also come from tabloids and newspapers, or even from professional journals, and not from refereed publications at the top of academic rankings.

Let us look at one area of intense debate on the future of business schools. A London Business School professor, Constantinos Markides confesses: “There is growing concern within the *Academy of Management* that a big and growing gap exists between management research and practice. ... The persistence of this gap is a mystery! Over the past 20 years, literally hundreds of ideas have been proposed to close it. Yet nothing seems to work and according to some, the gap continues to grow. Why is that?” [Markides 2011:123].

The history of academic management education has recently been enriched by lively academic research [Daniel 1998, Dameron and Dameron 2008, Zaidi and Sulejewicz 2010], revealing both self-congratulatory attitudes at business schools as well as neglect and even crisis. Practiced for half a century, education based on practical knowledge has
shown itself to be a methodological dead end, especially when compared with academic establishments which absorbed the novelties of triumphant neo-positivism, its Popperian critical version and, generally, its analytical philosophy. The prominent reports of the late 1950s shifted gears, and business schools progressively became subordinated to disciplinary academic education. Disappointment with “scientificity” waited around the corner. As Beyer [1982:588] wrote, “Increasing numbers of organizational scholars have begun to express concern that organizational/administrative science has had little effect on life in organizations.”

The quotations above (and below) demonstrate vividly that the three decades that followed the changes did not remedy the situation or produce a tranquilizer. Accounting for the hundreds of ideas that surfaced deserves a doctoral dissertation, because of their spectacular failures. The approaches encountered are related to thinking and action in everyday practice, such as five issues uncovered by a task force of the Association to Advance Collegiate Schools of Business which, “if addressed by AACSB International, its member schools, and other organizations, could assist business schools to achieve their fullest potential from scholarship and research.” [AACSB 2008]:

“First, current measures of intellectual contributions focus on inputs rather than outcomes. That is, the focus is on how faculty spend time (engagement in scholarship) and not on the value of outcomes produced (impact of scholarship on intended audiences).

“Second, business school and individual faculty incentives tend to create an overwhelming emphasis on discipline-based scholarship at the expense of contributions to practice and to pedagogical development.

“Third, the relationship between management research and teaching and the mechanisms to support their interaction, especially when these functions are not always performed by the same people, are not well understood.

“Fourth, there are inadequate channels for translating academic research to impact practice.

“Fifth, opportunities to support deeper, more continuous interaction between faculty and practicing managers on questions of relevance have not been fully developed”.

This analysis is followed with seven recommendations “for overcoming these issues to increase the overall value and visibility of business school research”. Apart from efforts embedded in empirical studies, we find more ambitious (for academics) attempts to theoretically resolve the problem of business’s light-hearted attitude towards intellectual achievements of management schools1 – for instance, a deeper reflection based on Kuhnian philosophy of science [Daft and Lewin 1990].

“Pasteur’s Quadrant”. One suggestion for investigating the uselessness of academic research for management practice is the “Pasteur’s quadrant”. The scheme was introduced by Donald Stokes [1997] in his book on the evolution of philosophical, organizational and financial approaches (paradigms) to innovation. Stokes is against the traditional, bipolar, linear approach to R&D, based on the separation and opposi-
tion of basic research and applied research. This is illustrated by simple graphics: (Fig. 1 and 2). Fig. 1 shows the popular model that R&D managers study all over the world and which assumes a linear sequence of transformation of scientific achievements into useful goods.

FIGURE 1. **Static version of the traditional paradigm: research variants**

<table>
<thead>
<tr>
<th>Basic Research</th>
<th>Applied Research</th>
</tr>
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FIGURE 2. **Dynamic version of the traditional paradigm: linear sequence of transformation of scientific output**

<table>
<thead>
<tr>
<th>Basic Research</th>
<th>Applied Research</th>
<th>Production and operations</th>
</tr>
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Source: [Stokes 1997:10].

Both scientific articles and practical documents on understanding and organization of research led to the same conclusion: “It follows clearly from these definitions that each consecutive stage is dependent upon the preceding one”\(^2\). Stokes set himself the task of formulating a “modern” paradigm on the basis of the historical current in the philosophy of science (Thomas S. Kuhn) and historical research on the development of technology and innovation. His critique was directed against the one-dimensional nature of the traditional model: every task was to be placed somewhere on the continuum between fundamental and applied research. A scientific effort that aimed at uniting the two aspects of innovation would need to be positioned in some central point (near 0) that would be against intuitive understanding of scientific advancement and effective research output. Stokes reasoned that for a large number, if not a majority, of investigations it would be difficult to ascribe an unequivocal, zero-one character and much research having socio-economic goals and possibly resulting in useful inventions can also be labelled “basic”. The microbiological research of Louis Pasteur provided the major inspiration for Stokes. He saw in Pasteur’s work a model of effort characterized by unparalleled social usefulness and deep insight into the structure of life. Placing Pasteur in the middle of the line shown in Fig. 1 would be completely senseless. He then “bent” the left axis at 90 degrees and obtained a four-cell matrix (familiar in strategic management) reproduced in Fig. 3.
He then produced a clear typology of scientific research projects in two dimensions: fundamental understanding of reality and practical relevance for human life.

(a) Upper left quadrant – research by Niels Bohr, a theoretical physicist: “pure basic research”; has no concrete practical goal, but is potentially useful at many later stages of organized research.³

(b) Lower right quadrant – applied research by Thomas Edison. As noted by Stokes, he explicitly forbade his collaborators from digging into scientific implications of their purely commercial research on the light form of electrical energy.

(c) Upper right quadrant – this is Louis Pasteur’s research: they at the same time broaden the frontiers of scientific knowledge and contribute directly to the betterment of life. Stokes places here the macroeconomics of John Maynard Keynes as well as the participants of the Manhattan Project.

The lower left quadrant appears to be empty. This is an admissible interpretation. However, Stokes fills it with something that resembles *Wissenschaft* rather than Science. Such research driven by curiosity of the author cumulates systematic knowledge about a phenomenon. He refers to the *Peterson Field Guide to Birds of North America*, a book now accompanied by a CD, that has neither scientific aspirations nor is useful for anything in particular. Such research can perhaps reveal future research paths and foretell new discoveries. One can only think of Charles Darwin’s *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* [1859].
Rigor versus Relevance: A Pseudo-Dialectical Solution

Stokes was not involved with humanities or social science and it is not our purpose to literally apply his model of innovation to research in management. Yet it seems quite easy to apply such a scheme to the problems of business school operation [Tushman, and O’Reilly 2007]. Basic research is exemplified by conventional disciplinary inquiries that collectively build a business curriculum. Abstract motivations and scientific rigor are basic characteristics. Consulting firms behave in the opposite manner: their interest is to solve (admittedly, we are optimistic here) a practical problem without paying attention to the rigors of academic science. It comes as no surprise that it can justifiably be claimed that a business school should include both sets of criteria in its functioning and, hence, occupy the Pasteur’s quadrant.

Unfortunately, as we have signaled above, a business school as an institution serving two masters has failed, according to many prominent representatives of both communities. Criticism addressed at both research and teaching is, at times, very severe. Not only, it is asserted, is academic knowledge of management irrelevant in practice, but it can be positively harmful. Sumantra Ghoshal devoted part of his work to the critique of the application of neo-institutional economics in management. After his untimely death, neo-institutional economics received a Nobel prize (Elinor Ostrom and Oliver Williamson). He rhetorically turned upside down a well-known adage (ascribed to Kurt Lewin 1946) “There is nothing so practical as a good theory”, to read: “There is nothing so dangerous as a bad theory” [Ghoshal 2005:86].

Thus a vicious circle becomes probable: a scientist sitting in his ivory tower is progressively less comprehensible for his students and trainees; they demand his research less and less; this in turn strengthens the perception the scientist is lagging behind the latest science and further alienates the two communities. In turn, the reputation of the school is undermined, as is, perhaps, the whole institution of higher management education [Khurana 2007, Gabor 2008]. Using the metaphor of a popular film, two types of gaps have been identified here: a) “lost in translation” where relevant research does not reach the practitioners, b) lost before translation where research undertaken is not relevant at all in practice [Shapiro et al. 2007].

Some find consolation in the assertion that the disturbing gap is an illusion. Markides, quoting himself [Markides 2007 and 2011:124], suggests that “Another possibility is that the perceived gap is just that — a perception that does not reflect reality. I have certainly argued elsewhere that our definition of ‘managerially relevant’ research is overly narrow and this gives the impression that the gap is huge. Managerially relevant research is not only what gets published in managerial books or managerial journals (such as Harvard Business Review or Sloan Management Review) but also research that gets disseminated to managers or students through teaching, speeches, and consulting. This means that if you have communicated some of your research findings or distributed any of your academic articles to your students, then by definition you are doing managerially relevant research — even if this research only appears in the most academic of journals”.
For our purpose, a good summary of the section can be found in the 2002 presidential address of Jean Bertunek, President of the Academy of Management, where she “dream[s] of reformulating the ‘dichotomy’ (between the rigor [of science] and relevance for practice) into tensions and dualities which should be overcome through mutual recognition of distinct types of research living under our large tent” [Bertunek 2002]. A young professor of the London Business School, Freek Vermeulen, undertook to realize this ambitious task.

The “dialectical” solution of Vermeulen

Freek Vermeulen is an associate professor of strategic and international management at the London Business School, which has for three years occupied the first position in the Financial Times ranking survey5. He authored the book Business Exposed, which “challenges conventional thinking and seeks to bust some myths” and which contains views that “are likely to be a major talking point in boardrooms and among senior management teams” [Vermeulen 2010]6.

The author effectively manages his in statu nascendi brand and in addition to the ordinary LBS website has also had his own http://www.freekvermeulen.com/, a blog website http://freekvermeulen.blogspot.com/ as well as two blogs managed by two reputed organizations from the business world, http://blogs.hbr.org/vermeulen/ (Harvard Business Review) and http://blogs.forbes.com/freekvermeulen/ (Forbes)7. The visual side (visual rhetoric of the messages) is enhanced with posed photographs of a young handsome man (rather than the “passport” photographs of most web CVs)8. One can join the community of Vermeulen’s tweeting fans by pressing the button “Freek on Twitter” on his personal website http://twitter.com/#!/Freek_Vermeulen. In June 2011 and 2012, respectively, he followed the tweets of (66) 149 persons and (190) 710 persons followed his. He is a member of the Editorial Board9 of AMJ and Organization Science, Strategic Organization and European Management Journal. Clearly, the credentials, career management, brand management, networking, business communication, textual and visual rhetoric demonstrate first class professionalism.

The Academy of Management, as has been noted, is an active participant of discussions on “rigor and relevance”. One of the journals sponsored by the organization, Academy of Management Journal, publishes numerous discussion articles and, from time to time, stages special sessions devoted exclusively to problems of functioning and organization of business schools, preparation of curricula, progress in research methodology, etc. Issue No. 6 of AMJ in 2005 contains a dozen texts on the “rigor and relevance” of research conducted by business schools. The entire session is entitled: Academy of Management Journal Editors’ Forum. Public Policy and the Public Interest: What If We Mattered More? [Rynes and Shapiro 2005].
The short four-page article by Vermeulen [2005], one of the 15 invited papers, describes a “nagging concern” related to “the feeling that management research does not sufficiently influence management practice”. Dramatic questions are posed [Daft and Lewin 1990] by luminaries of the organization and management scholars, such as ”Is the field of organization studies irrelevant?”. Vermeulen takes up the oft-quoted words of D.C. Hambrick at a presidential address to the Academy of Management, attributing our failure in presenting ourselves – and our knowledge, and our perspective – to the world of affairs to the consequences of the self-enclosed practices. “We read each other’s papers in our journals and write our own papers so that we may, in turn, have an audience … an incestuous, closed loop.” [Hambrick, 1994: 13]. Against this background he takes up the question posed by William Ouchi [2003, 2005]: “Should we get more involved in issues of public policy?” interpreting its meaning as identical to the motivations of the AMJ scholarly community, i.e. “[the] desire to matter more” [p. 978]. He explains that what makes Ouchi’s work relevant is that “he sets out in his research to solve a question of importance to practitioners working in that field”. A mere shift away from business/corporate policy will not change the academic system. In spite of forceful calls [Rynes et al. 2001] for it, also ineffectual would be the widening of the repertoire of research methods, invitation of practitioners or investigating other domains. Vermeulen refrains from adding yet another plea to this list of suggested solutions, because he has little doubt that it would be to no avail. He advances a “dialectic progress in management research”. Referring the reader to the HBR article, he sketches out the main tendency in business school evolution: from absence of research in “trade schools, [institutions in which] good ole boys [were] dispensing war stories, cracker-barrel wisdom and the occasional practical pointer” [Bennis and O’Toole 2005] to research subjected, in the mid-20th century, to rigors of scientificity promoted by newly established journals (e.g. ASQ in 1956). The conquest of the academic fortress is demonstrated by the following quotation taken from the ASQ No 1: “Research must go beyond description and must be reflected against theory. It must study the obvious as well as the unknown. The pressure for immediately applicable results must be reduced”.

The pendulum has, however, swung too far and the rigor of science has gradually crowded out many of the links with practice. “By cutting practitioners as an audience out of the loop, we cut out reality from the academic cycle. The return to the period before the ’sublime and aristocratic game’ is no answer either. ... Research that is not rigorous (in the sense that it would not pass the standards for acceptance of, for example, the Academy of Management Journal) cannot be considered relevant” irrespectively of how interesting it might seem. In other words, the solution is not to find an equilibrium between the two would-be poles, but rather their reconciliation” [Vermeulen 2005:979].

Hence his key methodological point: “[R]eal progress, following dialectic theory (Engels, 1940; Hegel, 1812, 1830), would not be achieved by finding some balance be-
tween the two (Staw, 1995), but by reconciling the thesis with its antithesis at a higher level of abstraction and understanding” [Vermeulen 2005:979]. Scientists provide answers which do not satisfy practitioners not because these are scientific (as they should be), but because the questions that were asked to start with lacked relevance. Thus relevance is the problem of the question asked by the researcher, while rigor is the problem of the answer produced, of the method applied to reach it. The question that was asked in the beginning will determine whether the answer will be useful independently from the degree of scientific rigor. Thus “asking questions that are of importance to reality, while not making concessions in terms of rigor in developing theory and empirical evidence, would provide most value” [Vermeulen 2005:979].

A synthesis on a higher level cannot be accomplished by appeals to synthesize rigor and relevance, since this will not change the behavior of academic researchers; all previous calls were unsuccessful. We could agree with Vermeulen when he says that this lack of change occurs because, ultimately, our academic system does not value relevance. The only way to change the attitude and behavior of people is to change the system in which they operate. The change of the system will come about through breaking open Hambrick’s ill-fated “incestuous, closed loop”, the vicious circle of studying, writing, and communicating only among producers and consumers of academic research. This entails guarantees that “the organizations we study also enter the loop as a valued, separate group of recipients of our research” [Vermeulen 2005]. The implication is that communicating to managers would become recognized in the academic system and that research output directed toward practitioners would be certain to be identified, valued, and rewarded [Vermeulen 2005:980]. The function of academic journals, assuring rigor, should not change. Relevance is the task of a different, separate track of disseminating research results.11

Vermeulen adduces dissatisfaction with the existing system which, understandably, is one necessary precondition for the progress of a synthesis. He refers here to Engels’ *Dialectic of Nature*. “Thus, some relatively simple changes to encourage people to bring their work to the attention of practitioners could set in motion a chain of systemic reactions that just might alter our world” [Vermeulen 2005:981].

In the second article by Vermeulen which appeared two years later, also through editorial invitation, he reflects on what a management researcher working within the system, might be able to do, to gain a little bit of relevance. In addition to the first closed loop of producer-consumer communication, “each academic researcher in the field of management would do well to add a ‘second loop’; one that engages practitioners directly, as a source of insight to inform research at its inception, but also as a group of recipients of the research when it is completed” [Vermeulen 2007:754]. Requirements spelled out by editors of scientific journals provide examples of rigor. Relevance is identified by his own effort which he formulates as an attempt to examine the academic papers that he uses in his executive education classes. Generally speaking, “relevance is not necessarily
about immediate prescription. It is not advice for some sort of managerial action that companies can undertake that will increase their profits next term by X percent. Relevance is found in generating insight practitioners find useful for understanding their own organizations and situations better than before” [Vermeulen 2007:755]. Concretely speaking, he compiles a short (and incomplete) list of five criteria, i.e., “factors enabling relevance: effectively labels a novel theoretical construct, reveals concrete and measurable consequences of the variables, reveals a clear trade-off among variables, addresses variables under managers’ control, [and] enables combination with other quantitative or qualitative materials” [Vermeulen 2007:755]. This ad hoc list is complemented by a register of some 20 articles that he uses in his didactic work. Other academics, he admits, might compile different lists and set different “relevance characteristics” to be used in teaching.

The next stage of assuring that academic research has something to do with managerial practice is an advice to theoreticians to venture into practice themselves, “to go into the mountains and smell the beast”. He forces himself to do this in spite of the fact that he studies “managers like a zoologist might study mountain gorillas: you do not have to have been a gorilla yourself to understand them” [Vermeulen 2007:756]. One does not need to be a manager himself or herself; what suffices is the regular direct interaction. Vermeulen’s own “trick” is to conduct frequent interviews and write didactic case studies that will later be used in management education (Fig. 4).

FIGURE 4. Vermeulen’s Two Loops of Communication

The first loop guarantees the rigor of science and screens out work that promises results according to some simple formulas of quick and easy success. The second loop
strengthens relevance for practice. Both communication loops complement and inform each other. In this manner, the “dialectics” of the AMJ 2005 article finds its implementation in the two “windows” of practice of a researcher/teacher working in a business school. Production of research relevant for practice is tantamount to engagement in multiple domains. It involves commitment (presumably also of resources): speaking to managers required investment in specific communication skills and, ability to transcending simple translation of academic results into the language of practice, and it may carry the risk of stigmatisation and “potential disdain and removal from the in-group of ‘serious academics’” [Vermeulen 2007:758]. Thus on the path to relevance, academic researchers can and should, on the one hand, talk to people in business and write case studies, but on the other hand, should devote at least one class in a semester to their academic investigations. “Perhaps people will find that their research works warrant only a five-minute discussion or so, but that should be sufficient; if research captures the attention of students or executives for just a few minutes, something has worked” [Vermeulen 2007:758]. Finally, writing managerial articles completes the construction of the second loop without too much disruption to the first one.

Some methodological criticisms of Vermeulen’s approach

A critical appraisal of Vermeulen’s attempt appears relatively straightforward as it raises doubts on several levels. His framing of “rigor and relevance” shows a rather narrow approach to the dilemma. On the one hand, the matter concerns “making an impact”, the influence of the academic producers of managerial knowledge on business people. In Vermeulen’s semantic field we find relevance, impact, audience, recipients, to matter more, “I will not be insignificant”, etc. The professional field of a researcher/teacher should not be constrained to a conventional audience of other scientists and students (where academics usually have a 100% “market” share). It should be complemented – permanently and not on an ad hoc basis – by a real and virtual audience of practicing businesspeople/managers. Here is a new market segment whose needs should be satisfied. The problem would have been trivial if it were not for the fact that “different things work for different people.” [Vermeulen 2005: 980]. As a result, standard conclusions of scientific papers abstracting from concrete problems of organizational realities increase the risk of non-relevance. In such a case, an individual researcher has the additional task of customization – provided, however, that the academic system recognizes such an effort as worthy of scientific research.

On the other hand, it is precisely the perspective of individual academics, their career in a “publish or perish” system that contains the suggestions of expanding the area of distribution of research results, enhancing the value of “professional” publications, or in-
deed of contracted expertise. This “second-loop” output and marketing communication with the business community does not count towards tenure or receives fewer points, if at all, in the journal rankings sanctified by the (British and/or Polish) bureaucracies, (e.g., KBN).

In other words, the scientific research of a business school ought to be more customer-oriented, assuming that clients are to be more broadly defined than it might follow from the content of didactic work in classrooms, study-room or cabinet activities. A readily formulated slogan for business schools towards mobilizing their intellectual resources so as to dominate both markets cannot easily be implemented precisely because business schools “shoot themselves in the foot” by distorting incentives for researchers, promoting technical rigor and neglecting practical relevance.

Such a proposal does not seem to be an innovation capable of instigating systemic change. It is not a novelty for a number of business schools of today. The “ivory tower” model has ceased to be sustainable in the last quarter of the 20th century [Sulejewicz 1996] and the necessity of mobilizing resources of the educational organizations in the areas of market, power and knowledge is not really disputed. It appears, moreover, that Vermeulen himself implements the model in the London Business School while it should only come as a “dialectical synthesis” at some “higher level of abstraction’. The LBS website displays his output, which that resembles a “well-balanced portfolio”: 9 academic publications (the two most recent are the ones quoted above, AMJ 2007 with 15 citations, AMJ 2005 with 14 citations); 9 managerial publications, 7 case studies, and two doctoral dissertations: 1999 (Utrecht; Business Administration) and 2010 (Tilburg; Organisation Science).

In other words, a researcher undertakes scientific projects not just to please and interest other academics, but rather to please and interest practitioners on a par with academic specialists. In order to do this, one should know what the questions of practical relevance are. How can one know this? Vermeulen appears to be saying that where there’s a will, there’s a way: he illustrated the second loop with only positive feedbacks. A contact with, for example, more ambitious managers undergoing additional education for an MBA and interviews with interesting practitioners realized while writing a case study are enough to “extract” adequate knowledge and identify appropriate research questions. Even if we assume, what appears to be an illusion or a naive belief in the marketing message of their own business schools, that the academic instructors will get in contact with a cognitively privileged elite of managers, what are the guarantees that interaction and mutual communication would end up formulating a searchable and theoretically promising theme while being relevant for practice? Mutual learning between theoreticians and practitioners has constituted an ideal present for decades in institutions educating business people and has been formulated abstractly in social philosophy for at least two centuries (Hegel’s Geist as Praxis). It suffices to read the titles of the alarmist articles referred to above and dig out quotations discred-
iting a sizeable body of “research” to entertain doubts as to whether practitioners will mobilize their efforts to bring in consciousness into the community of “rigorists” out of touch with reality. The problem is much more complex than merely contrasting ambitious, theoretical, abstract academic investigations with the down-to-earth, practically relevant (although not necessarily crudely utilitarian) and ready-to-use output of “relevantists”.

Evoking the dialectics of Hegel and Engels, Vermeulen pays lip service to these thinkers. The most severe judgment to be pronounced here is that nothing pertaining to Hegel’s *Logic* (1812–16) or to Engel’s *Dialectic of Nature* (1883) is to be found in his two papers despite the use of dialectical concepts on some occasions. Some might even welcome this. However, a paper highlighting in its subtitle the “dialectical progress” would end up being a philosophical, and maybe also a managerial, mystification. Vermeulen uses a commonplace formula for dialectics, i.e., thesis – antithesis – synthesis ascribing respectively, to thesis: the initial format of the business school (war stories), to antithesis: the academic formula of rigor, and to synthesis: the postulated “conciliatory” set-up. Without reference to dialectic thinking, the AMJ 2007 conciliatory formula is simply the “two-loop model” where any traces of dialectics disappear. The conciliatory model is merely a version of the “antithesis” already practiced already for some decades.

The main problem, however, is that the emptiness of “dialectical” concepts is also a sociological emptiness preventing the author from articulating the foundations of a deep-seated dilemma of management education. A demonstration of a possible interpretation of Hegel’s dialectic or a discussion of its “correct” use is clearly beyond the scope of the present article. We favor the interpretation of Richard Bernstein: “There has been a lot of loose talk about Hegel’s dialectic being a movement from thesis to antithesis to synthesis. Not only do these concepts play an insignificant role in Hegel’s philosophy; they are essentially static concepts and completely misrepresent what Hegel means by ‘dialectic’” [Bernstein 1971:20]. Obviously, dialectic is not “manageable” and cannot be a mechanical confrontation of thesis and antithesis. We shall not prolong the moment (sic!) of discussing dialectics just to emphasise that Vermeulen uses it merely in a crudely rhetorical sense (in common-sense parlance), evoking some concepts and leaving to the reader the search for “movement” supposedly contained in empiricist descriptions of various practices of business schools. Reference to J.S. Coleman (who cannot by any means be labelled a dialectician, a Hegelian, or a supporter of Engels) and management specialists Bartlett and Ghoshal without a shadow of supporting evidence gives the impression of it being a marketing trick and evoking forbidden names (Hegel, Engels) just to show “openness” and a “provocatively” desecrating potential of his thinking.

Vermeulen’s scheme of thinking can usefully be presented with the help of the previously mentioned Stokes’ model of innovation. The matrix from Fig. 3 finds its equiva-
FIGURE 5. *Rigor – Relevance* matrix of business school research

<table>
<thead>
<tr>
<th>Rigor</th>
<th>Relevance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>(2) Academic “ivory tower” business school (Bohr)</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>(3) Presumed “conciliatory” model of a business school (Pasteur)</td>
</tr>
<tr>
<td>No</td>
<td>(4)</td>
<td>(1) Research in the initial model of a business school (1a) Consulting firm (Edison)</td>
</tr>
</tbody>
</table>

lent in Fig. 5 which allows us to see and discuss his problems in a classical four-cell scheme reminiscent of strategic management. Three models of research practice are visualized at one time.

A short example: “BRICs” as a concept in international business studies

“The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood.” [Keynes 1936:383].

In November 2001, Jim O’Neill, an employee of Goldman Sachs investment bank, coined the term BRIC to describe what he considered would become a group of dominant economies in the world. Brazil, Russia, India, and China would overtake the G6 (US, Japan, UK, Germany, France, Italy) by 2050 in terms of GDP (in US$). The initial report published by the London unit of Goldman Sachs entitled “Building Better Global Economic BRICs” (No. 66) was part of an effort by the Economics Research unit from the GS Financial Workbench (SM) and sited at https://www.gs.com, GS Global Economics Website. Jim O’Neill was then M.D. and Head of Global Economic Research.

The main conclusions were that “Over the next 10 years, the weight of the BRICs and especially China in world GDP will grow, raising important issues about the global
economic impact of fiscal and monetary policy in the BRICs”. Thus the main advice was: “In line with these prospects, world policymaking forums should be re-organized and in particular, the G7 should be adjusted to incorporate BRIC representatives” (p. 1). Later events and analyzes only strengthened the resolve of the bank to propagate the BRIC idea in the financial, consulting and economic worlds.

Against such a macroeconomic background this, and in particular, all later reports investigated microeconomic factors “highly relevant for financial market prices” (2001, p. 5). In other words, the forecasting analysis of the economic growth of large developing/emerging economies served as a basis for institutionalized advice in financial markets, especially in relation to investment in shares and bonds contained in the newly created BRIC portfolios. After a short lag, a multitude of BRIC investment funds was created not only by Goldman Sachs itself but also by a number of leading banks and financial institutions of the developed world. The main message was and still is: invest in these large and fast-growing emerging economies and you will get a healthy rate of return on your investment, much higher than in the slowing and crisis-ridden West.

The visual rhetoric usually took the form of graphs displayed in Fig. 6a and 6b.

**FIGURE 6A. BRICs move up USD-denominated GDP rankings**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011*</th>
<th>2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>USA</td>
<td>USA</td>
<td>USA</td>
<td>USA</td>
<td>USA</td>
</tr>
<tr>
<td>2</td>
<td>Japan</td>
<td>Japan</td>
<td>Japan</td>
<td>China</td>
<td>China</td>
<td>China</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>China</td>
<td>China</td>
<td>Japan</td>
<td>Japan</td>
<td>Japan</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>Germany</td>
<td>Germany</td>
<td>Germany</td>
<td>Germany</td>
<td>Germany</td>
</tr>
<tr>
<td>5</td>
<td>UK</td>
<td>France</td>
<td>France</td>
<td>France</td>
<td>France</td>
<td>France</td>
</tr>
<tr>
<td>6</td>
<td>France</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
</tr>
<tr>
<td>7</td>
<td>Italy</td>
<td>Italy</td>
<td>Italy</td>
<td>Brazil</td>
<td>Brazil</td>
<td>Brazil</td>
</tr>
<tr>
<td>8</td>
<td>Spain</td>
<td>Russia</td>
<td>Brazil</td>
<td>Italy</td>
<td>Italy</td>
<td>Italy</td>
</tr>
<tr>
<td>9</td>
<td>Canada</td>
<td>Spain</td>
<td>Spain</td>
<td>India</td>
<td>India</td>
<td>India</td>
</tr>
<tr>
<td>10</td>
<td>Brazil</td>
<td>Brazil</td>
<td>India</td>
<td>Canada</td>
<td>Russia</td>
<td>Russia</td>
</tr>
<tr>
<td>11</td>
<td>Russia</td>
<td>Canada</td>
<td>Canada</td>
<td>Russia</td>
<td>Canada</td>
<td>Canada</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>India</td>
<td>Russia</td>
<td>Spain</td>
<td>Spain</td>
<td>Spain</td>
</tr>
<tr>
<td>13</td>
<td>Korea</td>
<td>Mexico</td>
<td>Australia</td>
<td>Australia</td>
<td>Australia</td>
<td>Australia</td>
</tr>
<tr>
<td>14</td>
<td>Mexico</td>
<td>Australia</td>
<td>Mexico</td>
<td>Mexico</td>
<td>Mexico</td>
<td>Korea</td>
</tr>
<tr>
<td>15</td>
<td>Australia</td>
<td>Korea</td>
<td>Korea</td>
<td>Korea</td>
<td>Korea</td>
<td>Mexico</td>
</tr>
</tbody>
</table>

* based on forecasts from our regional economists

Source: GS Global ECS Research
FIGURE 6B. The BRICs aggregate GDP looks set to overtake the US

Source: Goldman Sachs, BRICS remain in the fast lane, BRICs Monthly 11/06, June 2011, p. 1.

FIGURE 7. Financial stories about BRICs: rigor versus relevance?

<table>
<thead>
<tr>
<th>Relevance</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>(2) Theoretical financial economics (correlation of economic growth and the rate of return on investment)</td>
<td>(3) Theoretical financial economics (portfolio diversification as an advantage for investors)</td>
</tr>
<tr>
<td>Rigor</td>
<td>(4) Social Studies of Knowledge (financial economics analyzed through the theory of performatives)</td>
<td>(1) Goldman Sachs reporting on BRICs (superior performance in terms of both macro-economic (GDP) and micro-economic (RoR on investment) indicators)</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Let us briefly refer to the principal theoretical ideas that might throw light on the way this message has been circulating in the business world. We shall use the Pasteur’s quadrants so as to relate to the rigor-relevance debate.

The main story is summarized as follows:

- The BRIC economies are going to replace the current G7 as the largest economies (markets) by 2050.
- These economies maintain healthy growth rates despite the global financial crisis which is strongly affecting the West.
- The rates of return observed in their financial markets during the first decade of the 21st century will be maintained (robust forecast) during the envisaged period. The general investment message is clear: Buy stock of BRICs (for example, as packaged by the BRIC funds).

The main story of the theoretical financial economics pertinent to the example surely is the possible long-term correlation of macro-economic growth in a given country and the rate of return on investment in that same country. That is, high-growth countries should also show a high rate of return on financial investments (shares, bonds, other financial instruments). However, both theoretical and empirical research disconfirms any clean relationship between growth rates and rates of return on stocks. If anything, the relationship is negative! [Ritter 2005, Dimson et al. 2002, Siegel 2008, VAM 2009]. The practical managerial message from this rigorous literature is less assertive but clear: there is no general rule that might justify wholesale buy-ins into BRIC stocks.

**FIGURE 8.** Correlation between GDP per capita and stock returns (1900–2002)

Another story from rigorous financial economics concerns portfolio diversification as an advantage for investors promising, among other features, superior risk control. BRIC investments have been promoted also on account of diversification away from “tired” stocks of the “old” developed nations, basically OECD, G7, etc. As we know, most of these economies have suffered in the early 21st century from the global financial crisis and its aftermath. Again the Goldman Sachs story is not credible given rigorous analysis of the portfolio effects. “In fact, however, the volatility of a two-security portfolio can only be reduced below that of the more stable component when the securities have a correlation coefficient less than the ratio of the two individual volatilities (with the larger in the denominator). A portfolio is most likely to fail to meet this criterion if it contains both stable and very volatile securities because the ratio of their standard deviations will be small. ... When combined with a US portfolio, the higher volatility of the BRIC country indices results in a US investor finding no portfolio with a volatility less than that of a 100% domestic portfolio” [Javeri and Strong 2010: 45].

Finally, financial market instruments and actions of financial market actors, as conceptualized by financial economics, can be analyzed through the Social Studies of Knowledge (SSK) [Knorr, Bruegger 2002; Knorr, Preda 2005]. This is a methodological approach capable of revealing additional social dimensions of scientific process and output. In particular, the theory of performatives as used by D. MacKenzie seems opportune [MacKenzie 2006]. Briefly, and at the risk of oversimplifying, economists construct markets through their theories and modelling devices used to plan and execute economic actions. Lord Keynes’ famous “macro-methodological” pronouncement has been rendered “micro-methodological” and intertwined with individual action of market actors. Generally speaking, proclamation of action, delineation of a “theoretical story”, and application of a tool rooted in the theoretical story (the now “classic” example of the Black-Scholes formula of financial options as analyzed by MacKenzie) makes the financial market behave according to this theory. This is what is meant by performativity, i.e. “doing things with words” as the title of Austin’s book aptly summarizes. Another, more widely known version of performativity is Robert K. Merton’s [1949] notion of the “self-fulfilling prophecy”, in which the release and social circulation of a description or prediction enhances its validity [Ferraro 2012]. In case of BRICs, it seems, the sheer marketing power of Goldman Sachs, with a good dose of luck (cheap developing country stocks in the mid-1990s), need in the developed countries for recovery from the dot.com bubble collapse, and rejuvenation of the “tired” old economies in the new context of post-9/11 globalisation sufficed to generate a fresh boom and sparked large-scale flows of capital into the four economies [O’Neill 2011].

The history of BRICS as a concept is so far one of unprecedented success. The BRIC concept captured the imagination not only of financiers (HSBS, Paris Bas), but also of general and sectoral management and economic consultants (PwC, AT Kearney), of ex-
isting and newly created international organizations (IMF, SCO), political bodies (BRICS Summits), and academic institutions (Judge Business Schools at Cambridge University, Brunel University) [Sulejewicz 2012].

How do the four selected approaches/theories pertinent to the BRICs phenomenon fit the four cells of the Stokes innovation grid? A brief overview revealed as managerially relevant the original Goldman Sachs proposal (optimistic) and the diversification theorems (pessimistic). Scientific rigor can, within the positivist philosophy of science, and without hesitation, be ascribed to the two financial economics statements. The SSK approach challenges positivism and, for the purpose of this article, has been located in the non-rigorous set. It is also clearly non-relevant as it does not visibly answer any question that might be forthcoming from the financial community. Hence, the rigorous and relevant piece of research on the “BRICs” comes from the traditional financial economics (a statistical analysis of diversification potentials of various stock baskets). The relevant question of “where to invest free capital” has not been rigorously answered by Goldman Sachs. And yet in the first decade of the 21st century, massive flows of capital, a mass of new publications and institutional actions appeared to “confirm” the non-rigorous “knowledge” of the famous investment bank – notwithstanding the theoretical pronouncement to the contrary.16

Vermeulen’s two-loop model offers the following picture. In the first loop, general financial economics yields no specific managerial solutions for the problem of portfolio allocation. Indeed, these arguments contain an implicit warning against the Goldman Sachs “hype”. In the second loop, mutual interaction of the investment bankers, financial and economic consultants reinforced by distant backgrounds of politicians and academics for creates a social network that is conducive to practical decisions (investment) valued to the tune of billions of dollars. If the dominance of rigor were granted, these funds would not have flowed into BRIC economies, one conjectures, no amount of teacher–student interviews would probably have changed the picture.

The more general “dialectical” picture misleadingly evoked by Vermeulen yields no solution either. Positivist portfolio diversification theory has nothing to do with dialectical movement of economic categories. It does point to an answer to a practical question in a rigorous way though. Yet, it is only a tip of the iceberg, since the macroeconomic fundamentals needed to analyze microeconomic investment variables go beyond financial economics and lead into interdisciplinary development studies. Dialectical conceptions of social and economic development are, however, beyond the management or finance studies and include predominantly the public sphere, which is explicitly negated by Vermeulen (his criticism of Ouchi’s public concerns).

The main problem seems to be Vermeulen’s inability to think in social-scientific terms. That is, only marketing concepts are hidden behind the methodological categories. The public sphere is not to be touched since it will not make the business researcher or consultant “matter more”. It would be tantamount to a waste of resources and would
not result in greater sales of the business school’s services (spread of ideas, teaching, training, consulting, and other activities). The dilemma of rigor versus relevance is not solvable here, since these two concepts refer to social practices of science that are historically and socially determined. Rigor is an expression of the regulatory value of truth. Relevance (for economic practices under capitalism) is an expression of the regulatory value of profit. A simple “conciliation” has not been feasible. Simply adding a mere “dialectical” label added is not enough.

Vermeulen offers a story that seems to adequately describe the rigor and relevance of his “dialectical” conception: “A guide in the employ of the famous Lewis and Clark expedition to the Pacific Northwest one evening over the campfire announced to the explorers that he had both good and bad news for them. ‘The good news,’ he said, ‘is that we are making excellent progress. We have covered more miles than scheduled. The bad news is: we are lost.’ Researchers in the field of management to me often seem to suffer from a similar feeling.” [Vermeulen 2005:978]. This quote seems to describe adequately also the rigor and relevance of his “dialectical” conception.

The main problem we have touched upon in this text is “rigor versus relevance”, a recurrent theme in methodological reflection in management, and more generally, business studies. The field is vast and increasing somewhat unevenly but steadily. There are, however, views that dismiss the whole debate as “clearly misguided” [Rosanas 2006:4; Rosanas 2007:15]. J. Rosanas argues that there is no necessary trade-off between the two. Quoting Mario Bunge, he says: “Science is useful: because it seeks the truth, science is effective at providing tools for good and evil. Ordinary knowledge usually concerns itself with obtaining results that can be applied immediately: as a result, it is not sufficiently true, which means it cannot be sufficiently effective. Given a true knowledge of things, it is possible to manipulate them successfully. Science is useful because it is objective: without actually aiming for applicable results, science does in fact provide them, sooner or later. … Therefore, urging scientists to produce applicable knowledge is redundant: they cannot do otherwise. It is the job of technicians to put scientific knowledge to practical use, and it is the job of politicians to ensure that science and technology are used for the benefit of humanity” [Rosanas 2006].

What is missing in their otherwise persuasive argument is the social structure of science. What the “correct” combination of truth (rigor) and profit (relevance) is can only be decided in concrete, historical circumstances. And it may well be that the “dialectics” of social conflict over the outcome could be developed into a meaningful methodological stance.
Notes


3 This can perhaps be disputed. There are several intriguing stories that are a part of the history of the Manhattan Project and the circumstances surrounding the meeting (in 1941, in Denmark occupied by Nazi Germany) between Niels Bohr and his one-time student, Werner Heisenberg. Michael Frayne wrote a theatre play “Copenhagen” around the event. It premiered in London in 1998. See also quadrant (c).

4 In the sense of an organization implementing a “champion” strategy visualized in [Sulejewicz 1996:29–48].


6 A short video film accompanies the book on the Author’s website and is repeated on Youtube.com. Here you are some of the statements from the “reviews” of the book on the website: “A ground breaking new book that challenges common perceptions” (Educators’ Digest); “A rigorous challenge to many business assumptions from the hollowness of strategic planning to the value of indecisiveness” (Financial Times); “Business Exposed takes the reader on a whirlwind tour, exposing the surprising and sometimes appalling realities of how business decisions are actually made” (Top MBA; The Economist); “[Freek] is not hesitant to reveal the truths he has discovered no matter how much, or whom, it hurts” (Business Strategy Review); “The book is a must-read as it is a wake-up call of sorts for those who have to deal with diverse areas of management” (Educators’ Digest); “Interesting and, for a management book, surprisingly readable opinions on corporate strategy” (The Economist; Ornery and entertaining: Financial Times); “Believe it or not, there is an Associate Professor of Business Strategy by the name of ‘Freek’. He’s quite a good one, too” (People Matters); “Business Exposed is not a sensationalist tirade against the tenets of management theory, but a carefully researched and well-argued book which re-examines a number of core management ideas and practices, and demonstrates how new research presents a different picture – often radically so” (Meuse-Rhine Journal); “This will be uncomfortable reading for many senior bosses” (Director Magazine); “Business Exposed challenges conventional thinking and seeks to bust some myths” (People Matters); “The views presented in the book are likely to be a major talking point in boardrooms and among senior management teams” (Meuse-Rhine Journal); http://www.freekvermeulen.com/. The book, obviously, is available through the Amazon.com catalogue and has a splashed red-ink phrase on the cover: “[Freek Vermeulen] is a rising star and his pithy observations are both accessible and authoritative” (Financial Times); http://www.amazon.co.uk/gp/reader/0273732927/ref=sib_dp_ptu#reader?link.

7 The profile of the author on the blog sponsored by Harvard Business School http://blogs.hbr.org/vermeulen/: “Freek Vermeulen is an Associate Professor of Strategic and International Management at the London Business School. He is an expert on the topic of growth, examining issues such as strategic innovation, stimulating organic growth, international strategy, and the role of acquisitions and alliances. At the London Business School, Freek teaches on the MBA and Executive levels. He has designed and taught some of the School’s most successful courses such as Strategic Management, General Management, Strategies for Growth, and Mergers, Acquisitions and Alliances which, in combination, earned him the School’s ‘Best Teacher Award’. In addition, in 2008, he was announced as the first-ever recipient of London Business School’s ‘Excellence in Teaching Award’. He is also a much sought-after keynote speaker on company and industry conferences. He is a member of the Strategic Management Society and the Academy of Management” (accessed 11 June 2011).
8 G. Rose, Visual Methodologies: An Introduction to the Interpretation of Visual Materials, London, SAGE Publications, 2007, L. Faigley, Visual Rhetoric: Literacy by Design, keynote speech presented at the Center for Interdisciplinary Studies of Writing Conference “Technology and Literacy in a Wired Academy” 1998. The growth of marketing expenditure and the increasingly sophisticated marketing approach of business schools justifies devoting some space to selected examples of brand management as practiced by a “rising star” of strategic management (emphasized in red ink on the cover of his book “Business Exposed”, which the Financial Times reproduced on http://www.amazon.co.uk). The HBR blog labels him “The Strategy Freek”. Classical rhetoric would suggest that the entire passage in section 2 of this paper is simply a long argument \textit{ad hominem}. Let us remember that is not in the least an argument \textit{ad personam}. This might have been the case if in commenting upon the visual side (see picture), a (slang) expression “dish” were used. I am not competent to comment in this case.


11 Vermeulen’s proposal is, for instance, for academic journals to accept findings of a research project that may have already appeared in a managerial journal, and vice versa. It occurs that a paper submitted and undergoing evaluation and revision is rejected because, in the meantime, some version has been published in the business press (p. 980).


13 Let us note that Hegel’s dialectics is accepted and favorably reviewed by Andrew van de Ven in his last methodological work summing up a dozen of his earlier articles [Van de Ven 2007]. I do not suspect he does it “pour épater le bourgeois”.


15 “Higher growth may lead to higher returns and increased demand for capital. The weight of the BRICs in investment portfolios could rise sharply. Capital flows might move further in their favour, prompting major currency realignments.” Goldman Sachs, Dreaming with BRICs. The Path to 2050, Global Economics Paper No. 99, Oct 2003, p. 2.

16 Ritter makes the precise recommendation: “Countries with high growth potential do not offer good equity investment opportunities unless valuations are low” [Ritter 2005:489].

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Abstract

“Rigor and Relevance” is one of the recurrent themes in management research and business school operations. Surprisingly, in spite of considerable effort devoted to the task, not very much has been accepted among both theoreticians and practitioners. Two articles by Freek Vermeulen, professor of the London Business School, published by Academy of Management Journal serve as a basis for reflection and critique. His “dialectical” solution is shown to be a pseudo-solution having nothing to do with the concept of dialectics. The dilemma of rigor versus relevance is not solvable in the framework adopted by management scholars, since these two concepts refer to social practices of...
science that are historically and socially determined. Rigor is an expression of the regulatory value of truth. Relevance is an expression of the regulatory value of profit. A simple “conciliation” has not been feasible in the articles discussed. Adding a mere “dialectical” label is not enough. The correct combination of truth (rigor) and profit (relevance) can only be decided in concrete, historical circumstances.

**Keywords:** business research, methodology, rigor and relevance, dialectic
Introduction

Globalization has resulted in intensely competitive markets, which has made it more difficult for firms to remain profitable. In addition to cost-cutting imperatives, organizations are placing a premium on identifying and implementing programs that will be truly effective in augmenting employee performance and productivity at all hierarchical levels in all functional areas of business [Kreitner and Cassidy 2012]. This is especially true of the sales department, given that salespeople are charged with the all-important task of generating revenues – the “lifeblood” of an organization. Consequently, the sales department is widely recognized as critical to company success [Hair, Anderson, Mehta, and Babin, 2009].

Given their pivotal role in generating sales revenues, enhancing the performance of the sales organization takes on pre-eminent importance. Ascertaining whether organizational objectives are being attained requires a performance evaluation of all sales personnel, including sales managers, who are responsible for budgeting, recruiting, selecting, training and development, territory management, motivating, leading and controlling the company’s sales force in its direct revenue-generating activities. However, an
examination of the literature reveals that the thrust of sales research has concentrated on salespeople, with little attention devoted to sales managers. The fragmented research on sales managers has investigated diverse issues pertaining to their roles in social networks [Flaherty, Lam, Lee, Mulki, and Dixon 2012]; power [Busch, 1980]; training [Anderson, Mehta, and Strong, 1997; Powers, DeCarlo, and Gupte, 2010; Dubinsky, Mehta and Anderson, 2001]; ethical decision making [Ingram, LaForge, and Schwepker, 2007]; trust [Lagace, 1991]; leadership [Ingram, LaForge, Locander, MacKenzie, and Podsakoff 2005; Tanner and Castleberry, 1990; Lagace, 1991], and as boundary-spanners [Lyonski and Johnson, 1983], among others. Yet, no scholarly studies have focused on examining sales manager performance evaluation issues. This seems to be a glaring gap in the literature when Czinkota et al., [1997] contend that sales managers are central in creating and perpetuating company success. As in most functional areas of business, hierarchies are common in sales organizations. In many firms, titles like branch sales managers, district sales managers, regional sales managers, zone sales managers, and general or national sales managers can be found at lower, middle and higher echelons [Hair, et al., 2009]. Thus, it seems reasonable to expect that the skill-set required for superior performance at lower hierarchical levels must be divergent from that needed by sales managers at the upper levels. However, because no known studies have investigated this line of inquiry, the absence of empirical evidence raises uncertainty about whether current performance appraisals are congruent with the activities and responsibilities of sales managers at different hierarchical levels.

Investigating the influence of hierarchical level on sales manager performance evaluation is important for several reasons. First, a formal sales manager appraisal process should reflect the assessment of those responsibilities that are consonant with the hierarchical level of the sales management positions which most likely will vary considerably vis-à-vis their subalterns. Second, examining the impact of hierarchical level will help determine whether all sales managers are being evaluated using a homogeneous set of performance criteria irrespective of their positional level. In other words, is senior company management establishing performance evaluation processes and criteria for sales managers at each hierarchical level that are appropriate for their assigned responsibilities? Also, this investigation should help discern whether their performance appraisal criteria change as sales manager ascend the hierarchy. Third, this research has important sales manager selection and training implications. Since the planning, development, management and control tasks performed by higher level sales managers tend to be quite different from those done by lower level sales managers and salespeople [Hair, Anderson, Mehta, and Babin, 2009], sales managers should be given training appropriate for their hierarchical level to enhance overall sales force success. Sales management departments will likely underperform unless training and development procedures are attuned to the unique needs of each sales management hierarchical position.
Answers to the issues raised above are unavailable in the current literature on sales manager performance evaluation. Thus, the present study seeks to make a contribution to the extant literature by partially filling the gap in our knowledge on the extent to which sales manager evaluation criteria vary by hierarchical level. Since sales managers are found at different sales management levels, we want to learn whether performance evaluation criteria differ at these varying hierarchical levels, and whether sales management responsibilities and performance evaluation criteria are consonant at different hierarchical levels.

Our study begins with an overview of sales manager performance evaluation; then research questions are identified. Next, the investigation methodology is described, followed by empirical results. Finally, sales management implications are discussed, limitations of the study identified, and directions for future research suggested.

Sales Manager Performance Assessment

Sales managers play a pivotal, multifaceted role in planning, organizing, managing, directing, and controlling the sales departments of their organizations. Three particular characteristics underscore the importance of their positions. First, the tasks performed by sales managers are significantly different from those undertaken by salespeople. Second, sales managers are virtually the only managers in the firm who are directly responsible for generating revenues and profits; consequently, this fiduciary responsibility distinguishes them from their non-sales organizational counterparts vis-à-vis job requirements. Third, the sales management responsibility for managing the sales force and serving as the firm’s interface with customers is possibly the most crucial of all roles in perpetuating the success of the firm [Czinkota, et al., 1997]. Thus, the sales management position is critically important to the firm’s financial health, so assessment of sales management performance must be carefully and accurately accomplished.

Sales organization performance depends on the extent to which sales personnel engage in behaviors that contribute to the fulfillment of organizational objectives. Thus, it should be one of the most important concerns of senior management because, ultimately, the central purpose of a firm is to attain profitable customer outcomes. A critical part of an organization’s control processes entails establishing and monitoring mechanisms for evaluating sales organization performance with respect to the attainment of its goals and objectives, which powerfully impact those in the company. Hence, ensuring that desired sales organization and company goals are being achieved requires performance assessments of all sales personnel, including sales managers. Robert J. Greene, CEO of Reward Systems, Inc., a compensation and benefits management company based in Glenview, Illinois, asserts: “Performance management is the single largest contributor to organizational effectiveness. If you ignore performance management, you fail.” [Tyler, 2005].
Performance appraisal refers to a systematic process for (1) establishing whether sales personnel job behavior contributes to the fulfillment of a firm’s sales objectives and (2) providing specific feedback to the individual [Chonko, et al., 2000]. Despite the importance of evaluating the performance of sales managers, minimal empirical work has examined this issue. Indeed, the bulk of the investigations on performance evaluation focus on the appraisal of marketing units and salespeople [Evans, McFarland, Dietz, and Jaramillo, 2012; Dixon and Tanner, 2012].

A review of the literature reveals that multiple indicators of sales performance have been investigated, including both quantitative and qualitative evaluation bases, but much remains under-researched, including sales manager performance appraisals. Recently, several sales scholars advocated new directions for sales performance research, including neglected areas such as criteria for sales manager performance [Dixon and Tanner, 2012; Evans, et al., 2012; Blocker, Cannon, Panagopoulos, and Sager 2012; Johnston and Marshall 2009].

Although Peter Cappelli, head of the Wharton’s Center for Human Resources at the University of Pennsylvania, reports that 91% of US companies do performance appraisals, New York-based Sibson Consulting estimates that only about 35% to 40% of companies do performance reviews well and that 58% of Human Resources executives give their performance management systems a “C” or lower grade [Knowledge@Wharton, 2011]. In stressing the importance of sound performance evaluation, Gliddon asserts: “Often the criteria on which employees are evaluated are not closely related to the true needs of the organization. Therefore it is critical that employees are evaluated based on the behavioral competencies that are most critical for performing well in the job and promoting the goals of the organization. For the most accurate and legally defensible results, the behavioral competencies on which evaluations are based should be validated through a detailed review process.” [Gliddon, 2004:27].

In response to the dynamic nature of the increasingly competitive environment, firms can significantly benefit from developing and implementing effective performance evaluation systems for sales managers [Piercy, Cravens, and Lane, 2009]. A case in point: Johnson & Johnson Hospital Services was one of the first companies to successfully incorporate into its sales management evaluation system a competency profiling process that identifies sales management competencies based on new customer expectations and the established competencies of the sales team, which is utilized, in part, towards evaluating the performance of sales managers [Keenan 1993].

Performance evaluation generally refers to the process of appraising the extent to which the job incumbent engages in behaviors that contribute to the fulfillment of a firm’s objectives. Jackson, Keith, and Schlachter [1983] point out that evaluating the performance of sales managers will assist in identifying the incumbent’s job strengths and weaknesses. This should help in developing an action plan for correcting deficiencies, and communicating the desired behavior expected from sales managers. Thus, assaying sales manager performance is expected to lead to improved overall operation of the sales organization.
In comparing employees’ actual performance to the established standards, performance assessments need to appraise the extent to which job incumbents actually perform the tasks that should be “part and parcel” of their position criteria. When the appraisal process identifies where deviations occur (either in a favorable or unfavorable direction), determining the reasons for these differences is crucial. Uncovering employee weaknesses and correcting them, then capitalizing on employee strengths, are key purposes of performance evaluation.

According to Johnston and Marshall [2009], Ingram, LaForge, and Schwepker [1997], and Wotruba and Simpson [1992], a major task in performance assessment is identification of the salient criteria on which to assess an individual’s performance. In the context of sales managers, the present study sought first to identify which performance criteria are employed in evaluating their performance. To be compatible with extant work on sales force management, both outcome-based (objective) and behavior-based (subjective) measures were analyzed [Spiro, Rich, and Stanton, 2008]. Although there is a plethora of tasks that sales managers perform, eleven outcome-based and six behavior-based tasks were identified for further examination (see Methods section).

Sales Manager Hierarchical Levels

Management scholars such as Daft [2003], Hall [2002], Jones [2001], and Robbins and Coulter [2002] point out that hierarchies are a key organizational element. In organizations, managers – like other types of employees – are assigned different positions according to specialization and usually have responsibilities and tasks that are distinctly different from those of their lower- and higher-level managerial cohorts. For example, Cascio [1998] states that at lower levels of the organizational hierarchy, jobs are more clearly defined and have shorter-term objectives, whereas positions at the upper echelons are less well defined and more concerned with achieving long-term strategic goals. Gomez-Mejia, McCann, and Page [1985] maintain that lower-level managers concentrate on supervising subordinates, while upper-level managers focus on strategic planning, monitoring business indicators, evaluating organizational performance, and coordinating activities among the different functional areas. Moreover, Yinon, Amsel, and Krausz [1991] found that as managers ascend the organizational hierarchy, they become less involved with line personnel.

Sales manager positions in an organization’s hierarchy can display similar manifestations. Futrell [1997], in classifying sales management levels into first-line, middle, and top, theorizes that with each movement up the hierarchy, technical skills become less important and conceptual and decision skills become more critical. In a similar vein, Hair et al. [2009] identified requisite abilities and specific responsibilities of sales management positions, and posit that the requirements of the managerial position undergoes
a significant change as sales managers ascend the organizational hierarchy. Specifically, as lower-level sales managers move up to senior levels, their required abilities undergo change from “supervisory and managerial” skills to “administrative and leadership” skills, which are more appropriate at the upper echelons of an organization. Higher-level sales managers (e.g., national, general, or regional) communicate overall corporate strategy to lower-level sales managers whose central task is to execute the sales plans in their respective geographical areas. These national sales managers engage in strategic and tactical planning while providing overall direction to the sales force by communicating top-level management decisions regarding marketing and sales objectives to subordinate sales managers. In contrast, lower-level sales managers (e.g., district, branch and field sales managers), who report to the higher-level managers, are responsible for executing the sales plans and monitoring the daily activities of their salespeople.

Research conducted by Mehta et al. [1999] provides some empirical support that the tasks sales managers perform at the upper levels of the sales management hierarchy are viewed as distinctly different from those performed at the lower levels. Compared to their lower-level counterparts, as sales managers ascend the management hierarchy, their perceived role orientation changes to long-term, strategic issues such as adopting a profit and cost focus, marketing decision making, and attaining economic objectives. In short, because sales managers at different organizational levels have divergent role orientations, they cannot be viewed as a homogeneous group.

Given that sales managers perform diverse and divergent tasks at different hierarchical levels, it is necessary to ascertain whether the criteria employed in evaluating their performance reflects the nature of their jobs at a specific hierarchical level. Unfortunately, no evidence is available in the literature to shed much light on this issue, so three specific research questions, identified in the next section, were formulated for systematic inquiry.

**Research Questions**

Pursuant to discussion of the relevant extant literature in the preceding sections, this empirical investigation seeks to augment our knowledge of sales management appraisal systems by answering the following research questions:

1. What outcome-based (objective) and behavior-based (subjective) criteria are employed in assessing the performance of sales managers?
2. Are sales managers at different hierarchical levels appraised using homogeneous performance assessment dimensions?

Finding answers to these questions is important because examining the effect of sales manager hierarchical level on performance evaluation criteria may yield valuable insights useful in improving appraisal systems and better designing compensation packages for sales managers at different managerial levels.
Research Method

**Survey Development Procedure.** A survey instrument was designed to investigate current sales management practices from the perspective of sales managers. The self-administered survey sought information from respondents on the criteria used to evaluate the performance of sales managers, organizational characteristics, and personal demographic information.

After a preliminary questionnaire was developed, two steps were taken to assess the **content validity** of the measurement scales. First, 10 sales managers in the employ of different corporations located in a large metropolitan city in the USA were requested to assess how well the constructs being investigated in this study were captured by the various questionnaire items. After minor editorial changes were made, the survey was pre-tested using a convenience sample of 25 sales managers. Analysis of the responses from the pre-test indicated that no further changes were required in the survey instrument.

**Measures.** The measurement scales employed in the study were developed after a thorough content analyzes of the germane sales management literature [e.g., Dubinsky and Ingram, 1983; Guest and Meric, 1989; Shepherd and Ridnour, 1995], relevant sales management textbooks [e.g., Johnston and Marshall, 2009; Tanner, Honeycutt, and Erffmeyer, 2008; Hair, *et al.*, 2009; Ingram, LaForge, and Avila, 2008; Tanner, *et al.*, 2008; Spiro, Rich, and Stanton, 2008] and practitioner periodicals (e.g., *Sales & Marketing Management*), as well as discussions with sales managers during the survey development process described earlier.

**Outcome- and Behavior-Based Performance Evaluation Criteria.** Seventeen items that tapped both **objective** and **subjective** dimensions of performance evaluation were identified as important when assaying sales manager performance. For each of the categorical items, respondents recorded the appraisal criteria that applied to their respective organizations.

The eleven outcome-based performance evaluation criteria (focusing on economic and profitability) are achievement of company market goals, contribution to profit, percent of sales quota met, gross margin contribution, new accounts generated, contribution to market share, number of orders obtained, sales-to-cost ratios, return on assets managed, net margin contribution, and collections on receivables. The six behavior-based performance evaluation criteria are: ability to lead salespeople, customer relations, ability to motivate salespeople, overall administrative skills, ability to train salespeople, and customer service. Because the evaluation criteria identified above cover a wide range of sales manager tasks, they can shed light on the differences in performance assessment of sales managers at different hierarchical levels. Thus, each of the 17 items was statistically analyzed on an individual sales manager basis instead of in aggregate form.

**Sales Manager Hierarchical Level.** Consistent with extant sales management research [Leigh and Futrell 1985; Hair, *et al.*, 2009], sales manager hierarchical level was operationalized using the job title of the six sales manager levels (field, branch, district,
regional, general, and national). Respondents reported which job title most accurately fit their own sales management level. Field, branch, and district sales managers were classified as lower-level sales managers \( (n = 117) \); whereas, regional, general, and national sales managers were categorized as higher-level managers \( (n = 169) \). Some sales management job titles and associated responsibilities may vary somewhat across different company organizational hierarchies; however, the respondents’ job and reporting responsibilities were consistently reflected in their title vis-à-vis their respective firms.

**Demographic Characteristics.** Respondents provided information about their annual income, education level, gender, years of experience as a salesperson, and years of experience as a sales manager. They also provided organizational information on the number of employees, annual sales revenues, and primary activity of their company.

**Sample and Data Collection Procedure.** Using names and addresses obtained from the databases of a commercial mailing list company, the survey was administered to a national random sample of 600 sales managers from small- (below $10 million in annual sales), medium- ($10 million to $99 million), and large- ($100 million and above) sized organizations representing 15 industries in the US.

The study was administered using a two-stage procedure. In the first stage, a packet containing a cover letter, the survey, and a pre-addressed, postage-paid reply envelope was mailed to each sales manager in the sample. The cover letter explained the purpose of the study, importance of respondent participation, timeframe within which to return the survey, and assured respondents that their responses would be kept confidential. To encourage participation, respondents were offered a summary of the findings upon completion of the study. In the second stage of the data-gathering process, a follow-up letter was mailed a week later reminding participants to complete and return the survey within the specified time period.

**Response Rate.** Overall, 291 questionnaires were returned within the specified time period. Due to incomplete responses, five surveys were removed from further data analysis. This reduced the number of usable questionnaires to 286 or a final response rate of 47.7%, which closely approximates those reported in other studies on sales management [e.g., Erffmeyer, Russ and Hair, 1991; Sujan, 1986].

**Respondent Organizational and Demographic Characteristics.** The respondent organizational characteristics are reported in Table 1 which reveals that 50% of respondents represented industrial goods manufacturing firms, 19% – consumer goods manufacturers, 18% distributors, and 13% service-oriented organizations. One-third of the participants represented firms with fewer than 100 employees, 35% between 100–499 employees, 13% between 500–999 employees, and 19% between 1,000–5,000 employees. As shown in Table 1, respondents represented an evenly distributed cross-section of small, medium, and large organizations in terms of both sales and number of employees. With regard to demographic characteristics, 42% of the respondents had at least a high school education, 10% held an associate’s degree, 19% had earned a bachelor’s degree, 26% held a master’s degree, and 3% had a professional degree (J.D. or Ph.D.). The bulk
of the respondents (90%) were male. Respondent salaries were primarily from $60,000 to $99,000, although 20% of them indicated earning over $100,000. In terms of work experience, the average number of years as a sales manager and salesperson was 9 and 13, respectively. Finally, 41% of respondents were lower-level (field, branch, or district) and 59% were higher-level (regional, general, or national) sales managers.
Assessment of Non-response Bias. Consistent with extant research practices, two widely used procedures were employed to test non-response bias. First, as advocated by Churchill [1991], 25 randomly selected non-respondents were contacted by telephone and asked to respond to several questions about organizational and personal characteristics. Chi-square and t-tests were used to ascertain if any differences existed between respondents and non-respondents with regard to key organizational characteristics (e.g., annual sales revenues, number of employees) and respondent demographics (e.g., number of years as a salesperson, number of years as a sales manager, and income). No statistically significant differences (p < 0.05) were identified. As suggested by Armstrong and Overton [1977], the second test for non-response bias examined the differences between early and late respondents on the same set of factors. Based on this assessment, no significant differences were detected between early and late respondents. Hence, non-response bias does not present a major problem in this investigation.

Statistical Data Analyzes. To discern whether the performance evaluation criteria were influenced by sales manager hierarchical level, the data were statistically tested using a Chi-square. In assaying sales manager performance, the various evaluation criteria are considered dichotomous in nature—either they are employed or not. Because the performance evaluation criteria employed in this study are categorical (nominal) variables, Chi-square tests were deemed appropriate to verify the research hypotheses.

Findings

The frequency and percentage for the objective and subjective sales manager evaluation criteria for the lower and higher level sales managers, as well the results for Chi² tests, are presented in Table 2 and 3, respectively.

1. Findings for Outcome-Based Performance Evaluation Criteria

With regard to objective evaluation criteria, the results reported in Table 2 reveal that the performance of lower- and higher-level sales managers are assessed to a much larger extent using gross margin contribution, achievement of company market goals, contribution to profit, percent of sales quota met, number of orders obtained, and contribution to market share. Sales-to-cost ratios, new accounts generated, return on assets managed, net margin contribution, and collections on receivables are used, but to a much lesser extent for the performance assessment for both these groups. However, the absolute percentages are weighted a lot more for higher-level sales managers than their lower-level counterparts.

When examining the overall effect of hierarchical level on objective evaluation criteria, seven statistically significant differences (p < 0.05) are evident. More specifically, sales manager hierarchical level is related to achievement of company market goals,
contribution to profit, percent of sales quota met, new accounts generated, number of orders obtained, sales-to-cost ratios, and return on assets managed. While statistically significant, the data reveal that more emphasis on performance assessment is placed on number of new orders obtained for lower-level sales managers than their higher-level cohorts. The other four performance evaluation criteria – gross margin contribution, contribution to market share, net margin contribution, and collections on receivables – are not significantly affected by sales manager level.

**TABLE 2. Chi-Square Results: Impact of Sales Manager Hierarchical Level on Outcome-Based Objective (Economic or Profitability) Performance Evaluation Criteria**

<table>
<thead>
<tr>
<th>Outcome-Based Objective (Economic or Profitability) Performance Evaluation Criteria</th>
<th>LL Sales Managers Percentage [Frequency] (n = 117)</th>
<th>HL Sales Managers Percentage [Frequency] (n = 169)</th>
<th>Chi² Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement of company market goals</td>
<td>33.5% [43]</td>
<td>50.2% [85]</td>
<td>6.32*</td>
</tr>
<tr>
<td>Contribution to profit</td>
<td>29.9 [35]</td>
<td>50.8 [86]</td>
<td>6.83*</td>
</tr>
<tr>
<td>Percent of sales quota met</td>
<td>34.2 [40]</td>
<td>47.3 [80]</td>
<td>4.91*</td>
</tr>
<tr>
<td>Gross margin contribution</td>
<td>38.5 [45]</td>
<td>29.0 [49]</td>
<td>2.81</td>
</tr>
<tr>
<td>New accounts generated</td>
<td>16.2 [19]</td>
<td>29.6 [50]</td>
<td>6.63*</td>
</tr>
<tr>
<td>Contribution to market share</td>
<td>21.4 [25]</td>
<td>24.3 [41]</td>
<td>0.33</td>
</tr>
<tr>
<td>Number of orders obtained</td>
<td>26.5 [31]</td>
<td>10.7 [18]</td>
<td>8.45*</td>
</tr>
<tr>
<td>Sales-to-cost ratios</td>
<td>8.5 [10]</td>
<td>18.3 [31]</td>
<td>5.40*</td>
</tr>
<tr>
<td>Return on assets managed</td>
<td>6.8 [8]</td>
<td>18.9 [32]</td>
<td>5.58*</td>
</tr>
</tbody>
</table>

*Note: Chi² were calculated to determine statistically significant differences between each group of sales managers; LL = lower-level sales managers; HL = higher-level sales managers.

* p < 0.05
2. Findings for Behavior-Based Performance Evaluation Criteria

The results presented in Table 3 with respect to subjective performance evaluation show that lower-level sales managers are assayed to a larger extent using ability to lead salespeople, customer relations, ability to motivate salespeople, overall administrative skills, and ability to train salespeople. Customer service and turnover of salespersons are employed less frequently for this category of sales managers. While there is similarity on performance assessment criteria with respect to higher-level sales managers, the absolute percentages are weighted a lot more towards their lower-level managers. Evidently, lower-level sales managers are evaluated more using subjective criteria than their higher-level counterparts.

In investigating the overall influence of hierarchical level on subjective evaluation criteria, four statistically significant differences (p < 0.05) are discerned, such as the ability to lead salespeople, ability to motivate salespeople, ability to train salespeople, and customer service. Results show that for lower-level managers, more emphasis on performance assessment is placed on the ability to lead salespeople, ability to motivate salespeople, and customer service, whereas ability to train salespeople is used much more to appraise the performance of higher-level managers. Findings with regard to customer relations and overall administrative skills were non-significant.

<table>
<thead>
<tr>
<th>Behavior-Based Subjective Performance Evaluation Criteria</th>
<th>LL Sales Managers Percentage [Frequency] (n = 117)</th>
<th>HL Sales Managers Percentage [Frequency] (n = 169)</th>
<th>Chi² Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to lead salespeople</td>
<td>79.5% [93]</td>
<td>60.4% [102]</td>
<td>8.52*</td>
</tr>
<tr>
<td>Customer relations</td>
<td>52.1 [61]</td>
<td>43.7 [74]</td>
<td>1.32</td>
</tr>
<tr>
<td>Ability to motivate salespeople</td>
<td>51.3 [60]</td>
<td>36.6 [62]</td>
<td>6.06*</td>
</tr>
<tr>
<td>Overall administrative skills</td>
<td>37.6 [44]</td>
<td>44.4 [75]</td>
<td>1.30</td>
</tr>
<tr>
<td>Customer service</td>
<td>33.3 [39]</td>
<td>21.3 [36]</td>
<td>5.17*</td>
</tr>
<tr>
<td>Ability to train salespeople</td>
<td>23.1 [27]</td>
<td>36.7 [62]</td>
<td>5.97*</td>
</tr>
</tbody>
</table>

Note: Chi² were calculated to determine statistically significant differences between each group of sales managers; LL = lower-level sales managers; HL = higher-level sales managers.

* p < 0.05
Discussion

The findings of this research confirm that sales managers are evaluated using both objective and subjective performance appraisal criteria. Moreover, empirical findings of this study provide evidence that hierarchical level has a statistically significant effect on performance evaluation of sales managers. The 11 (seven outcome-based and four behavior-based) statistically significant differences that were identified specifically indicate that as incumbents ascend the sales management hierarchy to more senior management positions, their performance evaluation seemingly reflects greater emphasis being placed on achieving superior economic performance for their firms. These findings imply that the more senior the hierarchical position that a sales manager assumes, the greater the need to focus on attaining economic and profitability objectives.

Six (four objective and two subjective) performance evaluation dimensions (gross margin contribution, contribution to market share, net margin contribution, collections on receivables, customer relations, and overall administrative skills) did not appear to be influenced by sales manager level. This may indicate that, irrespective of hierarchical level, similar evaluation dimensions are used by upper-level management to assay the performance of all sales managers because these tasks and outcomes are “part and parcel” manifestations of their jobs. In other words, results suggest that sales managers evaluation factors are relatively similar vis-à-vis their jobs regardless of organizational level.

First, it appears that higher level sales managers are evaluated on the “number of new accounts generated” more than are their lower-level counterparts. A rational explanation for this finding is that, given their customer and market knowledge, higher-level sales managers are responsible for generating new accounts while lower-level managers are more responsible for maintaining on-going sales to these accounts. As such, these findings show that lower-level sales managers are evaluated more on the number of orders obtained than are their upper-level cohorts. Thus, upper-level sales managers, despite their hierarchical level, may continue to be viewed as “super salespersons” [Rosenbloom and Anderson, 1984], i.e., senior corporate management still expects them to continue selling to customers instead of making the full transition to primarily planning, organizing, leading, directing, managing, and controlling their sales manager subordinates. Second, the performance of higher-level sales managers is assayed more by using “percent of sales quotas met” than are lower-level managers. A plausible explanation for this finding is that as sales managers ascend their firm’s hierarchy, senior corporate management still holds upper-level sales managers responsible for meeting sales quotas on a national level. Third, the data show that higher-level sales managers are evaluated more on their “ability to train salespeople” – a subjective performance criterion – than are lower-level managers. It is conceivable that given their work experience, upper-level managers are viewed by top management as having greater requisite expertise and knowledge to train salespeople than their lower-level counterparts.
Sales Management Implications. This investigation has yielded several findings that can provide useful insights for upper-level corporate management in designing performance evaluation processes for newly selected or incumbent sales managers. First and foremost, employing a homogenous, “one size fits all” program for evaluating the performance of sales managers would not be advisable because sales managers at different hierarchical levels do not perform the same tasks. Steep hierarchies are common in many sales organizations and sales management positions at different levels (field, branch, district, regional, general, or national sales manager) have different performance criteria and responsibilities. According to Hair et al. [2009], as sales managers ascend the organizational hierarchy, the requirements of the managerial position undergoes a significant change. When lower-level sales managers ascend the organizational hierarchy, their required abilities change from “supervisory and managerial” skills to “administrative and leadership” skills, which are more appropriate at the upper echelons of an organization. Mehta et al. [1999] assert that it is important that the performance of sales managers be assessed using criteria consistent with and specific to the job requirements of the hierarchical level assigned. In a similar vein, Dubinsky, Anderson, and Mehta [2000] strongly advocate that retention and the reduction of dysfunctional turnover requires the design of performance appraisal and reward systems attuned to and consistent with the nature of the designated sales manager level.

Second, the findings of this study indicate that top management still expects sales managers to be “supersalespeople,” who can show the sales force how to sell by doing it themselves. Instead, as Anderson [1996] posits, the “traditional job” that sales managers perform needs to be transformed, as the current competitive and technological environment requires them to be lift their sights to that of “supermarketers”. What's more, Mazur [2010] indicates that the many marketing decisions and activities are undertaken by various individuals outside the marketing department, some of which may well be congruent with the competences of sales managers. In their contemporary role, the sales manager's job requires management expertise, leadership and motivation skills, the ability to use analytical tools for sales forecasting, and assessment of salesperson performance, as well as the ability to design, administer and operate all facets of the firm's marketing channels [Mehta, Rosenbloom, and Anderson, 2000]. As such, these job facets should also be incorporated when assessing sales manager performance at different hierarchical levels.

Third, in appraising sales manager performance, top management should devise both outcome-based (quantitative) and behavior-based (qualitative) criteria based on up-to-date job descriptions and performance expectations. For example, if the company objectives and competitive conditions necessitate a change in response to market conditions, the tasks, responsibilities, goals, and performance appraisals of sales managers at different hierarchical levels must also adjust to the new realities. Fourth, the move towards bottom-up appraisal and 360-degree evaluation of sales managers may be
healthy if employed for purposes of managerial growth and development in conjunction with training. General Electric (GE) first implemented 360-degree evaluations under its legendary CEO Jack Welch. When GE sales managers are evaluated, subordinate salespeople and peer sales managers complete a questionnaire that provides information on the manager’s skills and effectiveness across a range of managerial areas. Based on this input, the sales managers being appraised are provided feedback on their: (a) individual strengths and weaknesses in such areas as delegation, interpersonal relationships, and leadership; (b) performance comparisons with other sales managers in their training class; and (c) performance comparisons (based on GE’s database of surveys covering many years) with other sales managers at the same stage in their careers. Furthermore, each sales manager is given individual, confidential counseling on ways to improve performance, and a personalized plan is worked out to address specific areas of weaknesses. By emphasizing managerial development instead of performance evaluation, sales managers have an incentive to track their personal progress by voluntarily repeating this process on a regular basis [Rajput 2010].

**Study Limitations and Directions for Future Research.** Given the paucity of research on sales manager performance evaluation, this study contributes to the literature by empirically verifying that both objective and subjective evaluation criteria are influenced by sales manager hierarchical level. While this study augments our knowledge on the important position occupied by sales managers and their performance appraisal, the literature in this area still contains only fragmented research and is sorely lacking in conceptual development. It is hoped that findings from this study will encourage other scholars to do research on sales managers, although limitations in this study offer opportunities for future research. One area for future research is to more exhaustively document all the criteria used in sales manager performance evaluation. Along with a fuller array of performance evaluation criteria, more information is needed about the extent to which the different criteria are used and the weights assigned to each. Second, sales manager span of control was not considered in this investigation, so it is possible that as the number of subordinates being supervised increases, the sales manager’s efforts may be diffused to necessarily concentrate on activities that deal more with managing the sales-force as opposed to concentrating on economic outcomes. Therefore, empirical studies are needed to determine whether there is a difference in performance evaluation criteria due to sales manager span of control. Third, replications of this study may help determine whether similar findings are observed using samples from different industry groups in different countries [Chiang and Birtch 2010; Sayers, Lin, Kennedy, and Schrenkler, 2009; Shen, 2004; Prowse and Prowse, 2009].

It is hoped that the current work will spur future investigations to increase our knowledge of sales management positions, including performance criteria and evaluation systems. For instance, future studies should examine the effect of performance evaluation on other outcomes such as sales manager job satisfaction, and job turnover.
(functional and dysfunctional). Additionally, studies should examine whether performance assessment is associated with the development of sales manager training programs that are attuned to the jobs sales managers perform at different organizational levels. Furthermore, other research may examine whether sales manager performance assessment criteria influence the behaviors (motivation, commitment, and satisfaction) of salespeople under the supervision of the sales manager. It is reasonable to posit that the outcome of sales manager performance assessments may influence salespeople under their control. As the literature on sales management positions is still nascent, there is significant scope for scholarly contributions on how sales managers can be enabled to significantly increase their performance and make even greater contributions to the success of the firms they serve.

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Abstract

What objective and subjective criteria are employed in assessing the performance of sales managers? Are sales managers at different hierarchical levels appraised using the same performance assessment dimensions? Because of the paucity of research on these topics, finding and documenting answers to these important questions serves as the primary impetus for this empirical investigation. Results show that the performance of sales managers is not conducted using a homogeneous set of performance assessment factors. Specifically, the jobs that sales managers perform at the upper levels of the sales management hierarchy are evaluated using criteria that are distinctly different from those performed at the lower levels. Findings also reveal that, as sales managers ascend the management hierarchy, their performance assessment centers more on attaining strategic marketing objectives and economic outcomes. Sales managers at lower hierarchical levels are appraised using criteria that primarily involve managing, leading, controlling, and directing sales force-related activities. Managerial implications are discussed, drawbacks of the study identified, and directions for future research proffered.

Key words: sales managers, hierarchical levels, sales management evaluation criteria, behavior-based performance assessment, outcome-based performance assessment
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Jean Monnet Chair of European Integration
Warsaw School of Economics

Is EU Services Markets Integration Progressing?
Analyzing EU Trade in Services Through Commercial Presence

Introductory remarks

A common picture of EU services markets emerges from different analyzes on EU integration. Services markets are more difficult to integrate and, as one might expect, less integrated than others¹. Yet in many publications prepared at the request of the European Commission, particular emphasis is laid on a large potential for a functioning internal market for services [Monti, 2010]. Cross-border trade in services between EU countries accounts for 20% of total internal trade, far too little to contribute to delivering the advantages of the internal market².

On the other hand, an assessment of services integration within the EU market should not be limited to cross-border trade. Even a brief review of EU documents on the internal market for services shows that its policy is based not only on the principle of free movement of services between member states but also on the freedom for service providers to establish within the internal market³. This is much in line with the WTO definition of services trade⁴. The main reason for such an extended approach is that the ‘commercial presence’⁵ – when services are supplied through establishment (i.e. FDI) – is a very important mode of delivering services in the international context [Hoekman, Mattoo, 2008].

The bulk of research effort in the last decade on the EU internal market for services is devoted to the potential economic effects of the services directive⁶. Since the directive covers the temporary provision of services and sales through foreign establishments, these studies have simulated not only cross-border trade-induced effects but also FDI-induced effects, often using sophisticated econometric techniques⁷. Not unexpectedly, all of them have looked carefully at the EU regulatory environment for services to estimate possible effects of deregulation.

In this article we have focused on examining the past and current state of play in the internal market for services. Given that the biggest share of world services trade takes place through ‘commercial presence’⁸, this paper looks at activities of foreign affiliates within the European internal market for services. Because statistics on activities of foreign affiliates (FATS) are still under construction, they are hardly ever used⁹.
This essay asks one major question: has the contribution of EU-controlled affiliates within the EU internal market resulted in a greater integration of EU services markets?

The article contains three sections. It begins by considering some general issues related to measuring the ‘commercial presence’ in services. The article then examines the importance and patterns of EU sales through establishment. Lastly, it examines whether the integration of EU services markets has advanced through this channel.

The empirical analysis is based on Eurostat statistics derived from ‘Structural business statistics’ and ‘Balance of payments – International transactions’.

A big shortcoming of all studies concerning international services trade, whether it is a historical review or a forecast, is that the quality of available data is still limited, especially in terms of comparability both geographically and over time. As far as FATS statistics are concerned, the process of establishing a common framework for production of detailed statistics on foreign affiliates in the European Union accelerated in 2007 with the adoption of the Regulation on Community statistics on the structure and activity of foreign affiliates [Regulation (EC) No 716/2007]. Even so, the implementation of the harmonised methodology following the adoption of the FATS Regulation has not been completed and EU aggregates have not been published yet. It makes an analysis based on FATS data quite challenging.

Measuring the ‘commercial presence’

There are two main sources of statistics that are commonly used to describe international trade in services through ‘commercial presence’, i.e. delivered by offices, branches, or subsidiaries in foreign countries. They are very similar in meaning. Yet, there are some methodological differences between them.

One of these sources of information about transactions of affiliates of foreign-owned services firms are Foreign Direct Investment (FDI) statistics. There are two categories of FDI. ‘FDI abroad’ is international investment made by resident entities in affiliated enterprises abroad, and ‘FDI in the reporting country’ is international investment made by foreigners in enterprises resident in the reporting economy. Two main concepts used in the design of FDI are that of an ‘immediate host/investing country’ principle (FDI positions are allocated to the host/investing country even if the ultimate country is different) and that of a ‘lasting interest’ (FDI reflects the objective of obtaining a lasting interest. An entity resident in one economy (direct investor) acquires a lasting interest in an enterprise operating in another economy (direct investment enterprise) if they acquire at least 10% of the voting power of the direct investment enterprise) [OECD, 2008].

Foreign affiliate trade statistics (FATS) are another source of information about affiliates of foreign-owned services firms. ‘Outward FATS’ describes the activities
of foreign affiliates abroad controlled by residents of the compiling country. ‘Inward FATS’ describes the activities of foreign affiliates resident in the compiling economy. Unlike FDI, FATS statistics are attributed to the ‘ultimate controlling institutional unit’ (UCI). The UCI of a foreign affiliate is the institutional unit, proceeding up a foreign affiliate’s chain of control, which is not controlled by another institutional unit. Moreover, FATS focuses on affiliates that are majority-owned, i.e., more than 50% of ordinary shares or voting power is controlled by a foreign entity where control is the ability to determine the general policy of an enterprise [Eurostat, 2007].

One crucial conclusion that we can draw from the above presentation of the definitions and major concepts of FDI and FATS is that only FATS really measures the ‘commercial presence’ through foreign affiliates and FDI is a very rough proxy for service supply through foreign establishment\(^\text{12}\). If so, why do researchers use FDI stocks when quantifying trade via ‘commercial presence’?\(^\text{13}\) Two main explanations should be listed.

Firstly, researchers use FDI simply because it is the most accessible and regularly published indicator of economic activity of transnational corporations (TNCs) [UNCTAD, 2004:347]. FATS is much less comprehensive [Fillat-Castejón, Francois, Woerz, 2008]. Even if noticeable progress on collecting FATS statistics has been made in the EU during the last decade, FATS data are available only as of 2003, and only for a very limited number of countries until 2007. In addition to that, the application of thresholds by some EU member states in their data collections leads to a reduced comparability between countries. Moreover, for the majority of EU countries, FATS data before 2007 and data from 2007 onwards cannot be compared due to the introduction of the concept of the ‘ultimate controlling institutional unit’. The problem with comparability of FATS data was recently further complicated by the fact that the reference classification system, namely NACE, has been revised\(^\text{14}\).

Secondly, FDI might serve as a signal of changes in the economic activity of TNCs [UNCTAD, 2004]. We will return to the problem while comparing FDI with FATS for Germany.

The comparison of turnover of German foreign affiliates with German stock of outward FDI in 2007–2009 allows formulation of some observations concerning existing relations between them (Table 1). Firstly, the stock/sales ratios for services and for total industries have been quite stable over time. Secondly, the stock/turnover ratio for services is higher than for total industries (respectively 0.9 and 0.6 in 2009). Thirdly, the squeezing effects of the recent financial and economic crisis are visible only on the FATS side. The German direct investments abroad have extended especially in services. In the longer term it could bring increase in sales of German foreign affiliates as well.
TABLE 1. German outward FATS versus the stock of outward FDI by Germany between 2007–2009 (million EUR, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>Outward FATS (turnover)</th>
<th>Direct investment abroad</th>
<th>Stock/sales ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million EUR</td>
<td>annual growth rate</td>
<td>million EUR</td>
</tr>
<tr>
<td>Total sectors C to O (excluding L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>1 495 936</td>
<td>na</td>
<td>846 484</td>
</tr>
<tr>
<td>2008</td>
<td>1 532 813</td>
<td>2.5</td>
<td>854 267</td>
</tr>
<tr>
<td>2009</td>
<td>1 442 896</td>
<td>–5.9</td>
<td>891 155</td>
</tr>
<tr>
<td>Total services G to O (excluding L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>867 459</td>
<td>na</td>
<td>665 268</td>
</tr>
<tr>
<td>2008</td>
<td>869 088</td>
<td>0.2</td>
<td>687 419</td>
</tr>
<tr>
<td>2009</td>
<td>835 949</td>
<td>–3.8</td>
<td>723 457</td>
</tr>
</tbody>
</table>

Partner: All countries of the world

Source: Author’s computing and adaptation from Eurostat database statistics.

Importance of ‘commercial presence’ for EU internal market for services

In the EU the ‘commercial presence’ is about three times larger than cross-border flows of services (Table 2). However, the importance of trade in services under this mode varies among the EU countries. Some patterns can be seen, though. The EU economies can be divided into two main groups having the role of ‘commercial presence’ (CP) when compared with ‘traditional’ cross-border trade in services (CB) described in the current account part of the balance of payments (BoP). In the first group foreign investments play a predominant role in trade in services. Germany is the group leader, followed by France and the UK. As a matter of fact, in all EU ‘old’ big economies the annual value of turnover of their foreign affiliates exceeds the annual value of their exports in services. Other EU countries in the group are the following: Austria, Portugal, Finland and Sweden. The other group is, predictably, dominated by ‘new’ EU member states. It is formed by the EU countries where exports in services exceed trade through ‘commercial presence’.

As far as changes in CP and CB services trade are concerned, the available data do not allow any general observations to be made on the EU internal market. However, an analysis of individual cases is possible. First, we will look at situation in particular countries, then we will observe some trends in one particular service industry.
TABLE 2. **Trade in services in the EU in 2009*: ‘cross-border’ (CB) versus ‘commercial presence’ (CP) trade (million EUR)**

<table>
<thead>
<tr>
<th>Specification</th>
<th>CB</th>
<th>CP</th>
<th>CB/CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>60 479</td>
<td>40 282</td>
<td>1.5</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>13 914</td>
<td>1 354</td>
<td>10.3</td>
</tr>
<tr>
<td>Germany</td>
<td>166 717</td>
<td>835 949</td>
<td>0.2</td>
</tr>
<tr>
<td>Greece</td>
<td>26 983</td>
<td>6 639</td>
<td>4.1</td>
</tr>
<tr>
<td>Spain</td>
<td>88 215</td>
<td>157 775</td>
<td>0.6</td>
</tr>
<tr>
<td>France</td>
<td>103 691</td>
<td>478 864</td>
<td>0.2</td>
</tr>
<tr>
<td>Italy</td>
<td>78 775</td>
<td>196 762</td>
<td>0.4</td>
</tr>
<tr>
<td>Cyprus</td>
<td>5 779</td>
<td>2 671</td>
<td>2.2</td>
</tr>
<tr>
<td>Latvia</td>
<td>2 745</td>
<td>804</td>
<td>3.4</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2 657</td>
<td>2 092</td>
<td>1.3</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41 857</td>
<td>1 732</td>
<td>24.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>13 280</td>
<td>6 132</td>
<td>2.2</td>
</tr>
<tr>
<td>Malta</td>
<td>2 858</td>
<td>152</td>
<td>18.8</td>
</tr>
<tr>
<td>Austria</td>
<td>39 229</td>
<td>53 545</td>
<td>0.7</td>
</tr>
<tr>
<td>Poland</td>
<td>20 678</td>
<td>9 357</td>
<td>2.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>16 318</td>
<td>29 616</td>
<td>0.6</td>
</tr>
<tr>
<td>Romania</td>
<td>7 060</td>
<td>140</td>
<td>50.4</td>
</tr>
<tr>
<td>Slovenia</td>
<td>4 145</td>
<td>1 811</td>
<td>2.3</td>
</tr>
<tr>
<td>Slovakia</td>
<td>4 522</td>
<td>704</td>
<td>6.4</td>
</tr>
<tr>
<td>Finland</td>
<td>20 072</td>
<td>24 480</td>
<td>0.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>42 871</td>
<td>100 707</td>
<td>0.4</td>
</tr>
<tr>
<td>UK</td>
<td>176 331</td>
<td>664 001</td>
<td>0.3</td>
</tr>
<tr>
<td>EU</td>
<td>939 176</td>
<td>2 615 569</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Partner: All countries of the world

* The FATS data for 2009 are the most complete in terms of geographical coverage, although the year may not be typical as a result of the recent crisis. For Italy and Slovenia, data for 2009 are not available and therefore CB and CP statistics was taken from the nearest year: 2008 for Italy and 2007 for Slovenia.

CB- BP statistics: Current account, Services, Credit; CP- FATS statistics: Outward FATS, Total Services, Turnover.

Source: Author’s computations and adaptation from Eurostat statistical database.
Table 3 shows ‘cross-border’ and ‘commercial presence’ services trade in Belgium and Germany in 2004–2009. Belgium constitutes an interesting case, where constantly growing exports in services eventually replaced its outward FATS, which significantly contracted after 2006. The main reason, at least for the last two years, was that a sharp decrease in Belgian investments abroad amounted to almost 57% in services sectors in 2009. Changes in Germany were not so dramatic and evenly pronounced in both modes. After a regular increase until 2008, the value of CP and CB trade shrank by 4%.

<table>
<thead>
<tr>
<th>Specification</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total services exports</td>
<td>42,396</td>
<td>45,164</td>
<td>47,386</td>
<td>54,391</td>
<td>60,226</td>
<td>60,479</td>
</tr>
<tr>
<td>Total outward FATS in services</td>
<td>60,952</td>
<td>72,323</td>
<td>76,714</td>
<td>59,706</td>
<td>43,814</td>
<td>40,282</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total services exports</td>
<td>118,670</td>
<td>132,067</td>
<td>149,524</td>
<td>162,692</td>
<td>173,706</td>
<td>166,717</td>
</tr>
<tr>
<td>Total outward FATS in services</td>
<td>673,560</td>
<td>839,801</td>
<td>915,014</td>
<td>867,459</td>
<td>869,088</td>
<td>835,949</td>
</tr>
</tbody>
</table>

Partner: All countries of the world

* The main reason for choosing these particular EU countries is the existence of FATS data for the period before 2007. Apart from that, in the case of Belgium, according to Eurostat (See Eurostat Foreign affiliates of EU enterprises - outward statistics FATS, http://epp.eurostat.ec.europa.eu), there are comparable data for the reference period 2004–2008 because the UCI concept was not yet implemented there, in contrast to Germany which introduced this concept in 2007. Therefore, data before 2007 and data from 2007 onwards cannot be compared for Germany, nor for Belgium but in this case with a break in 2009. It is highlighted in grey in the Table. The figures were included for geographical comparison.

Source: Author's adaptation from Eurostat statistical database.

Chart 1 shows the development of the computer services trade under different modes of delivery of services in three large EU investors in 2004–2009. This pattern of trade is rarely observed. Only in Germany does ‘commercial presence’ constitute the main way of delivery of computer services abroad, although in Finland this mode of service delivery regained its importance in 2009. This was due to a considerable increase in ‘commercial presence’ trade but also to the contraction of cross-border exports due to the financial crisis. On the contrary, the trade squeeze of 2009 cannot be seen in German exports nor in Belgian exports. However, in 2009 Germany experienced a decrease in ‘commercial presence’ of more than 5% of total outward FATS. As far as Belgian outward FATS is concerned, this six-year period may be divided in two parts: the first of two years of decline and the second of three years of growth.
The services sector was the main field of activity for EU affiliates in 2009, with about 60% of total trade both in terms of turnover and number of persons employed. The ratio was similar for total trade and for the part directed towards the internal market. As far as the scale of activities is concerned, the internal market remains the biggest market for European foreign affiliates in terms of turnover, accounting for 51% in 2009. The intra-EU share of those employed amounted to 41% in the same year. However, these shares differed greatly among EU countries, ranging from 25.9% in the UK to 93.1% in Malta for the number of people employed (see Chart 2). For turnover, the shares ranged from 24.4% in Latvia to 90.1% in Malta. In most cases the shares for turnover exceeded or were just below the shares for the number of persons employed. The most extreme exception was Latvia, where that difference amounted to almost (–)45 pp. At the other end of the scale was Poland, where the difference between the employment ratio and the turnover ratio accounted for almost (+) 41pp.

One general conclusion may be drawn about the performance of European foreign affiliates on the internal market. They are apparently more productive than European foreign affiliates operating overseas. The result must be interpreted carefully, since dif-
ferences in product structure may lie behind this. One may expect the same arguments to apply to interpret the differences between EU member states. Further findings confirm this reasoning.

CHART 2. **Intra-EU share in the number of persons employed and turnover in European foreign affiliates in 2009 (%)**

Abbreviations: BE – Belgium; CZ – Czech Republic; DE – Germany; GR – Greece; ES – Spain; FR – France; CY – Cyprus; LV – Latvia; HU – Hungary; MT – Malta; AT – Austria; PL – Poland; PT – Portugal; RO – Romania; SK – Slovakia; FI – Finland; SE – Sweden; UK – United Kingdom.

Source: Author’s calculations based on Eurostat statistical database.

If we divide EU countries according to their involvement in the internal market in terms of turnover, we can distinguish three main groups. The first, and most ‘involved’, consists exclusively of ‘new’ EU member states. More than 70% of turnover of foreign affiliates of Malta, Poland, the Czech Republic, Slovakia, Lithuania and Hungary resulted from their activities within the EU. On the other hand, the impact of those foreign affiliates on the EU internal market is unlikely to be very important, considering that their share accounted only for 1.2% of the total in 2009. The second group, the largest, consists of ‘old’ EU countries, Cyprus being the exception. The shares for foreign affiliates from those countries were between 50%–70% in 2009. The impact of these foreign affiliates on the internal market is the most significant of the three groups. Their share was about 80% of the total in 2009. Taking turnover into account, three countries – the UK, Romania, and Latvia – are the least ‘engaged’ in the internal market.
'Trade and repairs' was the main field of activity of EU affiliates located inside the EU, with 38% for the number of persons employed and 46% for turnover (Charts 3 and 4). It was followed by 'transport, storage and communication' and 'financial intermediation' with 17% and 16% respectively for the number of persons employed and 15% and 26% respectively for turnover.

As one can see from Chart 3, different service sectors contribute differently to employment and turnover. The most ‘productive’ are financial intermediation and trade and repairs. In fact, it rather illustrates how very heterogeneous the services industry is and how difficult it is to compare between service sectors. Wholesale and retail trade, for example, have a very high turnover related to the sale of goods.²¹

**Chart 3. Number of persons employed and turnover in European* affiliates located inside the EU in 2009, shares by economic activity**

- **Number of persons employed**
  - Trade and repairs: 38%
  - Financial intermediation: 16%
  - Transport and storage: 17%
  - Hotels and restaurants: 6%
  - Other sections: 23%

- **Turnover**
  - Trade and repairs: 46%
  - Financial intermediation: 26%
  - Transport and storage: 15%
  - Hotels and restaurants: 1%
  - Other sections: 12%

*Reporting countries: Belgium, Czech Republic, Germany, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Hungary, Austria, Poland, Portugal, Romania, Finland, Sweden, United Kingdom.

¹ Much information about other sections is missing because it is treated by EU countries as 'confidential'.

*Number of persons employed* – Hotels and restaurants: Belgium, the Czech Republic and Cyprus 2008; Lithuania 2007; Poland na; Financial intermediation: Cyprus 2008; Spain and Poland na.

*Turnover* – Trade and repairs: Italy 2008; Hotels and restaurants: Italy, Cyprus and Lithuania 2008; Latvia 2007; Belgium, Czech Rep. and Poland na; Transport, storage and communication: Italy, Cyprus 2008; Czech Rep. na; Financial intermediation: Italy, Cyprus 2008; Latvia 2007; Spain, Poland na.

Source: Author’s calculations based on Eurostat statistical database.
These shares differed from country to country\textsuperscript{22}. For example, in ‘Trade and repairs’ it ranged from 11.9\% in Greece to 81.9\% in Romania for the number of persons employed. Turnover share ranged from 31.5\% in Finland to 89.1\% in Romania.

Chart 4 shows the structure of sales of foreign affiliates operating in three leading EU countries: Germany, France and the United Kingdom. As one can see, there are more similarities between French and British foreign affiliates than with German foreign affiliates. ‘Trade and repairs services’ dominated activities of German foreign affiliates while in the case of foreign affiliates from the other two countries, the structure of activities was more balanced.

![CHART 4. Number of persons employed and turnover of foreign affiliates located in selected EU countries in 2009, shares by economic activity](image)

Source: Author's calculations based on Eurostat statistical database.

The impact of foreign affiliates on the labor market, as illustrated in Chart 3, is related to particular activity categories of the services sector. For that reason, in every country\textsuperscript{23} except the UK, ‘Trade and repairs services’ contributed relatively less to employment than to turnover. For ‘Hotels and restaurants’, the opposite was true. In other service sectors the picture is unclear and depends on individual cases.
Progress of integration

When analyzing the progress of integration of services markets within the EU on a cross-border trade basis, one can observe that a process of disintegration has taken place. The share of intra-EU trade decreased between 2004 and 2010 both on the debit and credit sides (Table 4). On the other hand, the value of trade was generally growing and thus might constitute evidence of an increase in the value of intra-EU trade. Yet, ‘supply switching’ is a relative factor. That is, if trade from non-EU members rises faster, a displacement takes place.

Due to data quality, an analysis of trends in trade through ‘commercial presence’ cannot be founded on EU aggregate statistics. Taking into consideration the most important activity of EU foreign affiliates both in terms of number of employees and turnover, one can observe that the share of intra-EU trade in total EU outward FATS has increased (Table 5). From 2004 to 2009 the proportion of intra-EU trade in total EU outward FATS rose by 5.8 pp. At the same time the percentage of intra-EU trade in total EU inward FATS diminished by 8.2 pp., illustrating the growing competition from countries outside the EU.

A more detailed analysis on countries’ levels shows that the importance of intra-EU flows varies among different modes of delivery of services. Table 6 presents computer services trade in three EU countries – Germany, Finland and Belgium – which are large deliverers of such services under this mode. For Germany and Belgium, the share of intra-EU trade in cross-border trade exceeded the same share in ‘commercial presence’. In Finland the situation is different. The year 2009 excluded from consideration, in general, Germany increased its involvement into internal market. In Belgium the same trend existed quite strongly in trade through establishment. In Belgian cross-border trade
TABLE 5. ‘Commercial presence’ in EU* ‘Trade and repairs’ services between 2004–2009 (billion EUR, %)

<table>
<thead>
<tr>
<th>Specification</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total outward FATS</td>
<td>555.6</td>
<td>630.8</td>
<td>693.3</td>
<td>680.9</td>
<td>680.6</td>
<td>625.1</td>
</tr>
<tr>
<td>Intra-EU (27) %</td>
<td>55.7</td>
<td>55.9</td>
<td>56.4</td>
<td>61.8</td>
<td>61.5</td>
<td>61.5</td>
</tr>
<tr>
<td>Total inward FATS</td>
<td>na</td>
<td>na</td>
<td>624.6</td>
<td>926.9</td>
<td>925.0</td>
<td>895.7</td>
</tr>
<tr>
<td>Intra-EU (27) %</td>
<td>na</td>
<td>na</td>
<td>66.1</td>
<td>58.1</td>
<td>58.0</td>
<td>57.9</td>
</tr>
</tbody>
</table>

*Reporting countries: Germany, Italy, Austria, Portugal, Slovakia, Finland.

When data for a particular country were not available, the nearest year available was used: outward FATS 2004: Italy and Slovakia 2005; outward FATS 2006: Hungary 2005; outward FATS 2009: Italy 2008; inward FATS 2006: Austria 2007; inward FATS 2009: Germany, Italy and Finland 2008; inward intra-EU FATS 2006 and 2007: Portugal 2008.

Source: Author's calculations based on Eurostat statistical database.

A downfall trend prevailed until 2007. Finish outward FATS showed the sequence of opposite changes. As far as Finnish cross-border trade is concerned, the importance of internal market has generally diminished in it.

TABLE 6. Intra-EU flows in computer services trade in selected EU countries in 2004–2009 (%)

<table>
<thead>
<tr>
<th>Specification</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-EU cross-border trade</td>
<td>49.4</td>
<td>47.2</td>
<td>48.1</td>
<td>49.5</td>
<td>51.2</td>
<td>51.0</td>
</tr>
<tr>
<td>Intra-EU mode 3 trade</td>
<td>na</td>
<td>na</td>
<td>46.1</td>
<td>46.1</td>
<td>47.0</td>
<td>46.1</td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-EU cross-border trade</td>
<td>65.9</td>
<td>52.8</td>
<td>na</td>
<td>44.7</td>
<td>51.4</td>
<td>35.0</td>
</tr>
<tr>
<td>Intra-EU mode 3 trade</td>
<td>77.6</td>
<td>89.4</td>
<td>na</td>
<td>72.7</td>
<td>81.2</td>
<td>63.4</td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-EU cross-border trade</td>
<td>80.7</td>
<td>79.9</td>
<td>76.3</td>
<td>81.4</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Intra-EU mode 3 trade</td>
<td>na</td>
<td>52.0</td>
<td>62.3</td>
<td>68.0</td>
<td>72.6</td>
<td>na</td>
</tr>
</tbody>
</table>

Cross-border trade: Current account, Services, Other services, Computer and information services, Computer services; Mode 3 trade (commercial presence): Outward FATS, turnover, computer activities.

Source: Author’s computation and adaptation from Eurostat database statistics.
Conclusions

Lack of complete data renders the analysis of the state and trends of ‘commercial presence’ difficult, even though crucial. This services trade constitutes a substantial mode of delivery of services into the EU internal market, far more important than ‘cross-border’ trade. This is true even in service activities apt to be ‘cross-border’, like computer services.

The involvement of EU foreign affiliates in the EU internal market varies between countries. It is generally higher in ‘new’ member states. Nevertheless, considering the narrow share of these countries in total EU FATS, their impact on the internal market in terms of turnover and employment is not significant.

Based on data for the ‘Trade and repairs’ section, one can observe an increase in intra-EU transactions on the outward FATS side simultaneously with a decline of intra-EU transactions in inward FATS. This shows that liberalisation within the EU internal market is not a dominant factor in determining ‘commercial presence’ patterns. It matches changes in ‘cross-border’ services trade.

On the other hand, one can interpret this (rising competition from extra-EU affiliates in EU inward FATS and an opposite trend in EU outward FATS) as the existence of a deeper market integration at a more global level, i.e., with countries outside the internal market. Given the actions undertaken by EU member states and institutions to improve the functioning of the internal market for services, one can, however, expect that the process of EU regional market integration will advance, especially in such areas as intra-EU trade through commercial presence.

Due to the quality of available data, it is hard to assess whether the role of FATS in EU trade in services is increasing. For now, the figures available for some EU countries deliver a mixed picture.

Notes

1 This subject is discussed more generally, for example, by [Pelkmans, 2001], or in the context of the EU service directive by [Bertola, Mola, 2009].

2 One can find neither a specific minimum ceiling set for intra-EU trade in services nor any analogue indicators in economic literature. The share of cross-border trade in services in total trade is compared instead with the share of services in EU Value Added (20% versus 54%). See Commission Extended Impact Assessment of Proposal for a Directive on Services in Internal Market, SEC(2004)21.

3 First of all, these principles are set out in the Treaty on the Functioning of the European Union. Their central role to the internal market for services was confirmed in EU secondary legislation.
For GATS modes of services supply see, for example, [WTO, 2005, pp. 4–5].

Mode 3 under GATS terminology.


See: [Copenhagen Economics, 2005], [de Bruijn, Kox, Lejour, 2006], [European Commission, 2012 a].

World services trade has been estimated at less than 30% for traditional cross-border trade and over 50% for commercial presence. Source: [WTO, 2005, pp. 52].

A study by The Swedish National Board of Trade constitutes an exception here. See [The National Board of Trade, 2012].

All author’s calculations were based on Eurostat database statistics extracted in April/May 2012. For access to the Eurostat database see http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database.

Whilst the observations contained in this part are obviously not limited only to the services industry but also might be applied in particular to manufacturing, the definition of international services trade, as mentioned earlier, makes the issue of particular importance here. In the case of manufacturing, there is far greater liberty of choice among various approaches that firms can use to enter foreign markets. I.A. Moosa discusses this latter issue in more detail. See [Moosa, 2002:11–15].

B. Hoekman computed that the US sales/stock ratio in 2003 was of 0.35 [Hoekman, 2006].

FDI flows are recorded in a particular year and, broadly speaking, show more variation in the dynamics and patterns than FDI stocks.

In an effort to reflect changes in industries, the detail of the NACE classification has been substantially increased, especially for service-producing activities where this increase is visible at all levels of classification. As a result, any easy comparison between NACE Rev. 2 and its previous version Rev. 1.1 in the case of services is not possible, according to Eurostat. For details see [Eurostat, 2008].

The relative importance of CP trade is visibly higher in the EU than in the entire world. See footnote 10.

Data on Belgian direct investment positions before 2008 are not available.

Germany was the EU’s largest deliverer of services under ‘commercial presence’ in 2009. Finland and Belgium were in fourth and fifth place, respectively.

One of the big shortcomings of FATS statistics apart those already listed is confidentiality of data, which makes an analysis of patterns of ‘commercial presence’ trade very difficult. For example, one cannot compute shares by region going beyond the main division between extra- and intra-EU trade, nor shares by sector taking into consideration such service sectors as computer activities or research and development.

Author’s own calculations based on Eurostat database statistics.

See Chart 2 for the reporting countries.

One can find more examples of service industries that are statistically much broader than a simple services supply in [The National Board of Trade Report, 2012].

Data availability has determined the selection of EU countries taken to analyze patterns of trade. They are the following: Germany, Greece, France, Italy, Latvia, Hungary, Austria, Portugal, Romania, Finland, Sweden, and the United Kingdom.

See the footnote above for the reporting countries.

The theory of preferential liberalisation is deeply explained by [R. Baldwin, Ch. Wyplosz, 2012].

A more detailed description of these actions and initiatives can be found in a Commission communication on the implementation of the Services Directive. See [European Commission, 2012 b].
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Abstract

The bulk of research effort in the last decade on the EU internal market for services is devoted to the potential economic effects of the services directive. In this article we have focused on examining the past and current state of play in the internal market for services. Given that the biggest share of world services trade takes place through ‘commercial presence’, this paper looks at activities of foreign affiliates within the European internal market for services. Because statistics on activities of foreign affiliates (FATS) are still under construction, they are hardly ever used. This essay asks one major question: has the contribution of EU-controlled affiliates within the EU internal market resulted in a greater integration of EU services markets? Based on data for the ‘Trade and repairs’ section, one can observe an increase in intra-EU transactions on the outward FATS side simultaneously with a decline of intra-EU transactions in inward FATS. This shows that liberalisation within the EU internal market is not a dominant factor in determining ‘commercial presence’ patterns.

Keywords: EU internal market, commercial presence, trade in services
Purpose of the research

The key postulate put forward in this research is to try to measure the degree of the buildup of moral hazard related to implicit state guarantees for systemically important financial institutions. In that sense, the study is concerned with the “time dimension” of systemic risk [IMF 2012:8]. The benchmark considered as part of the research is the theoretical value of an implicit put option contract (on the underlying stock) held by shareholders of “too big to fail” financial intermediaries. The resulting modeling is conducted on an ex-post basis, using historical data. The main contribution of the paper is the proposition of an options-based framework for illustrating the value attribution of implicit government guarantees. In turn, it might be postulated that such a measure may be used for quantifying the extent of the buildup of moral hazard related to pledges of state support for systemic firms. Theoretical considerations account for assigning a problem-specific interpretation to one of the cornerstone relations of options literature: the so-called “Call-Put Parity”. Based on the adopted methodology, an empirical example is presented to illustrate the applicability of the scheme as well as to outline its shortcomings. In conclusion, relevant issues are suggested for future refining of the concept and policy implications.

The Call-Put Parity

The original version of the Call-Put Parity of option pricing was formally developed by Stoll in 1969 and modified by Merton [Klemkosky and Resnick 1979:1141]. The equation describes a theoretical relation between the prices of predefined types of “call” and “put” options. Thanks to the concept, it is possible to estimate the missing component, given all other variables.
As indicated above, “Call-Put Parity” does not apply to all kinds of options. In its most basic form, the assumptions are as follows [Hull 1999:238–241]:

- Options involved are “European style” – which means that they cannot be exercised ahead of a predefined, fixed date.
- The options incorporate claims on the same asset.
- The strike price for the underlying asset must be the same in case of both – “call” and “put” options.
- The expiry date (being at the same time the exercise date) is also the same for both – “calls” and “puts”.
- In the basic version – which shall be used for the research – it is assumed that the underlying asset does not yield any additional return (dividends, coupons) on top of capital gains.

As for notation, the following shall be used (based on the proposition of Hull, 1999):

\[ \begin{align*}
    c & = \text{price of a call option} \\
    p & = \text{price of a put option} \\
    X & = \text{strike price of call and put options} \\
    S & = \text{spot price of underlying assets} \\
    T & = \text{time until expiry of options (measured in years)} \\
    r & = \text{risk-free rate}
\end{align*} \]

**EXHIBIT 1.** Profit and loss profile of a portfolio composed of “S” and “p”

Call-Put Parity recognizes the fact that it is possible to construct two portfolios exhibiting the same profit-and-loss profile with the use of cash, underlying assets and options. The value of both positions ought to be the same under frictionless [Knoll 2002:27] conditions [Tu and Chin 2004:5].

The first portfolio within the equation is composed of underlying assets (e.g. stock) and a put option on them [Hull 1999:238]:

\[(S + p)\]  \[1\]

The second portfolio includes the present value of the cash needed for exercising the call, as well as a call option on the underlying assets [Hull 1999:238]:

\[(Xe^{-rT} + c)\]  \[2\]

EXHIBIT 2. Profit and loss profile of a portfolio composed of “X” (defined in terms of present value) and “c”

According to the logic of Call-Put Parity, the two portfolios need to be equally valued in order not to provide arbitrage opportunities. Thus [Hull 1999:238]:

\[(Xe^{-rT} + c) = (S + p)\]  \[3\]
If the equation is not fulfilled, an arbitrage profit may be achieved by selling the overvalued portfolio and buying the undervalued one. The combined investment should not be burdened with the risk of price changes, since both positions (long and short) exhibit the same profit and loss profile [Hull 1999:239–241].

Applications of Call-Put Parity encountered in literature

Call-Put Parity is an essential part of the options valuation framework. However, its application stretches beyond just the pure derivatives pricing field of interest. The logic of the concept was applied on a number of occasions.

In 2002, Knoll used the framework for outlining regulatory arbitrage opportunities, which in his opinion were made available thanks to the use of the conceptual approach of the Call-Put Parity scheme [Knoll 2002]. He argued that due to their focus on the legal form of financial deals (rather than on merit), regulations leave significant room for evasion of prudential rules. In effect, economic outcomes – similar to the ones prohibited by law – can be achieved using legally compliant methods. In the underlying cases, the act of structuring deals (which otherwise would be considered illegal) to achieve corresponding goals without violating the law was a case of arbitrage.

Hatgioannides and Karanassou used not so much the parity equation itself, but rather its options-based logic for underpinning their concept of Warrant Economics [Hatgioannides and Karanasou 2011:1]. According to their view, the global financial crisis of 2008–2009 was largely a culmination of a process that was marked by the adoption of asymmetric incentives in business. The approach was characterized by the increased disparities in terms of wealth distribution among economic agents. A small corporate elite boosted their claims on the payoff derived from the economic boom (call option), while limiting liability in the case of bust (put option). As evidence of the former component of the framework, the gradual surge of the importance of profits within the structure of the American gross national product was quoted. This gain came at the expense of salaries and wages, resulting in ever-greater income disproportions within society. On the other hand, the “put” part of the concept was based on obtaining implicit government guarantees by entities believed to be “too big to fail”. Direct provision of taxpayer-sponsored funding in the case of institutions such as AIG, Citibank, Fortis and RBS provides practical backing for the latter thesis [Hatgioannides and Karanasou 2011:6–19]. As a result, corporate business logic assumed the privatization of profits and nationalization of losses.

Flood applied option pricing – along with Call-Put Parity – for analyzing incentives of parties involved in deposit insurance plans [Flood 1990:26]. Referring to theoretical relations between prices of various option types, he argued that by guaranteeing depositor money, insurance providers effectively write a put option on the assets of the involved bank and grant this right to shareholders of the lender. On the other hand, the guarantor
eventually ends up holding a call option on the underlying assets, should compensation be required. By the same token, Flood’s remarks are applied, in the framework developed below, to the issue of government guarantees for financial institutions.

The implicit character of put options, which are granted to shareholders by creditors, may be derived from an option-based approach to company valuation, referred to as Contingent Claims Analysis [Gapen, Gray, Lim, and Xiao 2004:7–8]. With this approach, owners of an enterprise have a junior claim on the residual value of a company. Creditors, on the other hand, are faced with topping the bill for eventual losses in case of a default. Thus the position of shareholders may be regarded as a call option, with debt holders writing a put option on the firm’s assets. As a generalization, the Contingent Claims view recognizes that (with regard to valuation of an enterprise) [Gray, Merton and Bodie 2007:9]:

\[
\text{assets} = \text{implicit call} + \text{default free debt} - \text{implicit put}
\]  

Wilson applied Call-Put Parity for valuing the common stock of banks holding so-called “toxic assets” [Wilson 2010:31–35]. He analyzed the influence of the value of the put option on decisions of shareholders to dispose of problematic positions from balance sheets of financial institutions. According to the study, owners of a bank will demand a premium on top of the market value of distressed assets, due to the positive “Vega” [Ianieri 2009:238] of the “right” to place their holdings with bailout providers.

Essentially, Wilson’s paper uses the same logic as the research conducted below. In contrast, however, Wilson did not directly refer to modeling of the moral hazard related to implicit government guarantees for systemically important institutions. His article concentrates on pricing distortions of toxic assets.

The concept of applying Call-Put Parity for modeling moral hazard

The main idea of the research below is based on the concept that the portfolios included in the Call-Put Parity equation can be used for presenting the positions of shareholders of “too big to fail” financial institutions, and state authorities who may eventually be faced with a bailout decision.

By the logic of the argument, at a given starting time – which could be viewed as the beginning of the option contract – officials responsible for taxpayer money have at their disposal an indefinite supply of funds, which could be used for bailing out faltering financial institutions. Specifically, the government could be expected to have at its disposal the present value of money needed to provide financial assistance to banks or other systemically significant financial intermediaries. Let us call this variable “B” – for bailout cost.
On the other hand, the decision whether to rescue a firm is largely left to the discretion of state authorities. They usually do not have a binding commitment versus private shareholders of banks; thus the character of guarantees granted to crucial market players remains implicit. Therefore, governments may be perceived as holding an option for rescuing lenders – in effect often acquiring control over the entities [Shahabian 2011:351]. Let this option be referred to as “b” – for bailout option.

At the starting point of the options contract, owners of “too big to fail” institutions are the shareholders of the underlying firms. Therefore let their stakes be marked as “E” – for equity holdings.

However, due to the fact that the involved financial intermediaries are systemically important, the owners expect the government to intervene in case of distress, in order to avoid social costs being inflicted on the rest of society. Such expectations trigger the moral hazard of implicit government guarantees. Naturally, equity holders may lose their stakes in the course of the rescue operation. Still, they will not need to face the full consequences of the fallout of their earlier investment decisions. As observed by Miller, according to the Call-Put Parity interpretation, shareholders of a company enjoy only a limited liability for the business of their firm. If at debt servicing date, the value of company’s assets turns out to be lower than that of its liabilities, owners of the entity have an option of not covering the shortfall. They might hand the company over to creditors instead [Miller 1988:110]. In the case of a state-sponsored bailout, they have an option to pass control over the company to the government. Let this opportunity be marked with “g” – for giving up by shareholders.

In effect, it is possible to conclude that as far as the above logic is concerned, the positions of shareholders and state authorities concerning a systemically important financial institution may be modeled along the lines of the Call-Put Parity:

\[ b + Be^{-rT} = E + g \]  

where:
“b” stands for “c”
“B” stands for “X”
“E” stands for “S”
“g” stands for “p”

However, a modification may be implemented in the “bailout parity” outlined above versus the original Call-Put Parity equation. It can be argued that under the conditions of a non-distressed market economy, governments should not have an incentive to acquire control over financial institutions. The reasons for such an opinion are the distorted incentives of state authorities, guided by political rather than economic principles. As Ellyott put it: “The long and sobering list of negatives leads the author to support nationalization only when it is clear that there is no other reasonable approach.” [Ellyott 2009:16]. In other words, there is no general justification for governments holding a call
option on privately owned companies. Even if state officials effectively have such a right (due to the “bailout-provider-of-the-last-resort” function), the prerogative should not be perceived as an asset, as it logically should not be exercised – even in case of bailouts. Proof of the claim that aid packages for financial institutions are a result of exercising put options on behalf of shareholders (rather than of utilizing call options by governments) may be derived from the timing of such events as state-sponsored recapitalization schemes. During the 2008–2009 crisis these occurred when financial intermediaries became illiquid (or even insolvent), and – more importantly – the price of their equity exhibited a downward trend [Verret 2010].

EXHIBIT 3. **Standard & Poor's 500 index from September 2007 – August 2009 (closing prices)**

The deteriorated standing of market players became an incentive for state authorities to intervene. However, this was not a normal time to exercise a call option, which is used to claim ownership of well-performing investment positions, while limiting potential losses related to failures (see the upward sloping P&L profile along the axis of underlying assets’ price in Exhibit 2). On the other hand, times of disruption are the ideal opportunity to take advantage of put options on distressed companies’ shares. In such a scenario, the profit tends to increase with slumping equity prices. Effectively, exercising a put option may be regarded as selling assets above their current market price (see Exhibit 1), which makes sense for the seller but not for the buyer of the underlying stock. Therefore, during financial market turmoil, governments have no incentive to use their call option, but shareholders might have reasons to exercise the put.

Thus, the “b” component in the equation above (5) ought to be valued at null price, since the right to nationalization should not be sought. As a result:

\[
\text{if } b = 0 \text{ then } B e^{-rT} = E + g \tag{6}
\]

As indicated earlier, the goal of this research is to try to quantify the value of implicit government guarantees and thereby to assess the extent of the buildup of the related moral hazard.

By the logic of the concept presented above, an opportunity for shareholders to give up their holdings in return for state aid, is referred to as “g”. As a result, by rearranging equation (6) we get:

\[
g = B e^{-rT} - E \tag{7}
\]

### Empirical application of the “bailout parity”

The main obstacles to applying the “bailout parity equation” above are the constraints derived from the Call-Put Parity framework. First of all, there is the assumption that the options involved are European style. Such a notion suggests that in the case of implicit government guarantees, pledges are granted at a given time for a fixed period. Because of the very nature of informal arrangements, it is difficult to conclude when parties become subject to them. The notion seems to be reinforced by the fact that state support measures are meant to be granted to systemically important institutions. Yet, the methodology of defining which financial firms may pose systemic threats is only being developed. Thus, it is difficult to conclude when an entity becomes crucial from the systemic stability point of view – and when the implicit guarantee is effectively being granted by the state.

Because the study described below aims to present an illustration of how moral hazard within the financial industry can be explained with the use of Call-Put Parity, a Euro-
A European-style version of the equation is used for clarity of presentation. The corresponding formula for American-style options consists of an inequality, indicating the upper and the lower band of valuation [Hull 1999:242]. This approach may be methodologically more appropriate, but yields less communicative outcomes. Essentially, American-style options should be worth at least as much as European ones, plus the margin for the flexible exercise date feature. The inclusion of the upper band of valuation within the framework does not yield significant additional findings, apart from the fact that implicit bailout pledges may actually be worth more than in the European style variant (for verification please see Appendix 1 – charts of outcomes of the study for American-style options).

Furthermore, pledges of fiscal aid are usually not defined, either in terms of value or duration. Therefore, a simplifying assumption is made: that such informal insurance contracts are valid until the actual default situation occurs. It is then that pledges need to be exercised, in order to remain plausible. Naturally, after the bailout is completed, sovereigns might choose to engage in further (implicit or explicit) guarantees for the same financial institutions that have just been rescued. Such a move, however, is treated in this paper as the start of a new options contract, separate from the one that is the subject of the study. This approach is consistent with the Call-Put Parity relation, which assumes definite validity of options (the time until expiry is known and defined as “T”).

Knowing the start date of the guarantee, it is possible to determine its tenor ex-post. However, it is hardly feasible to do so ahead of the approaching distress situation. This is why, in order to achieve applicability of the concept in empirical research, “dummy” dates need to be assumed. Events marking fundamental changes in financial regulation may be used as triggers for reassuring equity holders of banks about the possibility of taxpayer-sponsored support.

For the purpose of the research conducted below, it shall be presumed that the cornerstone year for triggering implicit state guarantees for systemic financial institutions in the United States was 1999. That was when the Glass-Steagall Act was abolished. The event is widely – although not unanimously [Pelaez and Pelaez 2009:3] – believed to have fostered conditions for consolidation of the financial industry [Kay 2009:23–24]. As such, the legislative shift may have been perceived as an incentive for financial conglomerates to become more systemically important through gains in the size and scope of operations. In turn, the increased significance of individual companies for the industry became vast enough to require implicit guarantees on behalf of the government. The year 1999 was also when the Gramm-Leach-Bliley Act was adopted, effectively preventing comprehensive cross-sector financial supervision in the United States [Hurley 2010:355]. Such a regulatory development could have added to the “too big to fail” problem, by making it easier for financial conglomerates to engage in difficult-to-monitor cross-selling activities of structured products. The only constraint with regard to such deals was market discipline – which now is considered a profoundly flawed prudential tool [Moss 2011:99].
The choice of start and finish dates is motivated by the fact that the study below aims to take into account “implicit” state guarantees – the kind that are anticipated by market participants, but not directly spelled out by officials. Therefore, the research period begins when economic agents could have gotten incentives to grow excessively in size, scope and economic significance – which triggered the “too big to fail” bailout pledges in the first place – and concludes once the pledge is fulfilled, and eventually is made explicit.

With reference to the above argumentation, for the purpose of the numerical example presented below, the assumed start date of implicit government guarantees will be 1 January 2000. As this was not a trading day, market data as of the close on 31 December 1999 will be applied.

The exercising time of the underlying options contracts shall account for the actual rescue triggering date, when state officials committed themselves to support the regarded institution – in this case, 16 September 2008 [Paulson 2010:223–242]. The pledge may not have been granted in full all at once, but for simplicity it shall be treated in this manner. Such an approach remains consistent with the postulated ex-post character of the study.

The assumption concerning the equal strike price for the call and put option should intuitively hold within the proposed framework. In the case of a state bailout, the provided funds account for the money that needs to be spent in order to keep an ailing financial institution afloat. Similar costs should be expected in the same situation, if the financially troubled firm was acquired by a third party. The strike price is independent of the current market value of underlying assets and can be set at any given level agreed in the options contracts. Thus, the possible disparities between the market capitalization of “insured” entities at the beginning of the options contracts and the cost of their bailouts do not constitute a methodological obstacle.

For the purpose of the empirical research conducted later, pledged funding of taxpayer-sponsored bailouts will be used to determine the strike price of options. Financial institutions that become subject to state aid may not utilize the full extent of provided facilities. Still, from the fiscal point of view, it is the ceiling of acceptable bailout costs that marks the government commitment. Thus, whether used or not, the total amount declared by the state shall be included in the calculations.

Due to the fact that implicit government guarantees are granted for long periods, one resulting modeling problem might be to agree on the risk-free rate to be applied to the time value of money. Regular options contracts most often account for expiry dates under one year. In the case of implicit pledges of state support, this time can stretch over several years, during which market-specific benchmark interest rates may fluctuate significantly. In order to align the outcome of the study with reality, the adopted methodology resorts to the original logic of Call-Put Parity. It assumes a justification of the underlying equation by means of arbitrage. The risk-free rate is an essential part of the arbitrage model, as it determines the income from cash positions, or the cost of financ-
ing of non-cash parts of the portfolios involved. Therefore, in order to grasp the rationale of the concept, the cost of funding employed needs to closely track the effective financing rate over the arbitrage period.

As part of the research, which will be based on an example from the U.S. market, a weighted average of daily effective federal funds rates will be applied over the maturity of the options contract. In turn, “The daily effective federal funds rate is a weighted average of rates on brokered trades.” [The Federal Reserve, 2012]. This approach enables capture of the true cost of financing the involved arbitrage positions.

The example for the application of the “bailout parity” described above shall be computed based on the case of the failure of American International Group (AIG) in 2008. A number of features exhibited by the rescue operation undertaken by U.S. authorities make the company an ideal object for empirical studies. For once, there are reasons to believe that the insurer was saved because it was regarded as systemically important [Committee on Oversight and Government Reform 2010:131]. The notion is of the first order of importance when taking into account that the scheme described earlier is to measure the value of implicit government guarantees granted to institutions perceived as “too big to fail”. Furthermore, the AIG support package included equity commitment on behalf of the authorities, leading to the practical nationalization of the financial group [Davidoff, 2011:1738]. Secondly, there is well-documented data set on the provision of U.S. state-sponsored funding for the purpose of this bailout [Sjostrum 2009]. Such detailed figures are indispensable for conducting necessary calculations. Thirdly, prior to its financial difficulties (as well as thereafter), AIG was a listed company, which makes it easy to access the historical series of data on its market capitalization – one of the inputs.

The computation procedure of the “bailout parity” equation

The grand total of funds made available to AIG by various authorities in the United States amounted to $182.5 billion. The pool was not provided all at once. The sum was a cumulation of multiple liquidity support and recapitalization programs. The timeline of events is presented below.

In order to align the total bailout sum with the computation procedure, the value of all pledged tranches shall be discounted to their present amount – as of the bailout trigger date on 16 September 2008. The discount rate used is calculated as the weight-averaged daily effective federal funds rate for the corresponding period [The Federal Reserve 2012a] – similar to the risk-free rate computed for the parity equation. As continuous compounding shall be used for underlying calculations, the discount rates need to be suitably converted [Watsham and Parramore 1997:7]. All figures are rounded up to four decimal places. The resulting value of state-sponsored financial support shall be used as the exercise price of the bailout option “B”:
EXHIBIT 4. **Timeline and value of AIG bailout**

<table>
<thead>
<tr>
<th>Date</th>
<th>Value of the support pledge</th>
<th>Description of the event</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 September 2008*</td>
<td>$85 billion</td>
<td>Revolving Credit Facility provided for AIG by the Federal Reserve</td>
</tr>
<tr>
<td>9 November 2008</td>
<td>$40 billion</td>
<td>U.S. Treasury decides to recapitalize AIG with equity, as part of the Systemically Significant Failing Institutions program</td>
</tr>
<tr>
<td>9 November 2008</td>
<td>–$25 billion</td>
<td>In response to the recapitalization, the Federal Reserve reduces the Revolving Credit Facility to $60 billion</td>
</tr>
<tr>
<td>10 November 2008</td>
<td>$22.5 billion</td>
<td>Federal Reserve Bank of New York pledges to buy a portfolio of mortgage-backed securities from AIG’s subsidiaries (through Maiden Lane II LLC)</td>
</tr>
<tr>
<td>11 November 2008</td>
<td>$30 billion</td>
<td>Federal Reserve Bank of New York agrees to provide funds (though Maiden Lane III LLC) for the purpose of buying back Collateralized Debt Obligations (CDOs) from holders of Credit Default Swaps (CDS) issued by a subsidiary of AIG as insurance of the CDOs. As a result the CDO investors agree to terminate the underlying CDS.</td>
</tr>
<tr>
<td>2 March 2009</td>
<td>$30 billion</td>
<td>U.S. Treasury offers an equity facility to be drawn upon by AIG in case of necessity, in return for preferred shares.</td>
</tr>
</tbody>
</table>


EXHIBIT 5. **Present value of pledged state support to AIG**

<table>
<thead>
<tr>
<th>Start date</th>
<th>End date</th>
<th>Nominal sum</th>
<th>Number of days in the discount period</th>
<th>Interest rate</th>
<th>Present value of the pledge on 16 Sep 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Sep 2008</td>
<td>16 Sep 2008</td>
<td>$85 billion</td>
<td>0</td>
<td>—</td>
<td>$85 billion</td>
</tr>
<tr>
<td>16 Sep 2008</td>
<td>9 Nov 2008</td>
<td>$15 billion*</td>
<td>23</td>
<td>1.5484 %</td>
<td>$14.9854 billion</td>
</tr>
<tr>
<td>16 Sep 2008</td>
<td>10 Nov 2008</td>
<td>$22.5 billion</td>
<td>24</td>
<td>1.5419 %</td>
<td>$22.4772 billion</td>
</tr>
<tr>
<td>16 Sep 2008</td>
<td>10 Nov 2008</td>
<td>$30 billion</td>
<td>24</td>
<td>1.5419 %</td>
<td>$29.9696 billion</td>
</tr>
<tr>
<td>16 Sep 2008</td>
<td>2 Mar 2009</td>
<td>$30 billion</td>
<td>167</td>
<td>0.4857 %</td>
<td>$29.9334 billion</td>
</tr>
</tbody>
</table>

* Net amount of the $40 billion recapitalization and the –$25 billion Revolving Credit Facility Reduction.

Source: own calculations.
The grand total of the above present values of bailout pledges, as of 16 September 2008 amounted to $182.3656 billion.

Using the data series of the daily effective federal funds rate, the cost of financing over the maturity of the underlying implicit guaranty option may be computed – that is, for the assumed period from 1 January 2000 until 15 September 2008. The corresponding, continuously compounded equivalent rate of daily effective federal funds amounts to \( r = 3.2977\% \). Please note that for cash flows accessible on a given date, the overnight fed funds rate is set on the basis of the benchmark from the previous day\(^1\). As 1 January was not a trading day, for the purpose of computing market capitalization of AIG on the start date of the implicit government guarantee, the last closing price shall be used (31 December 1999). In effect the “E” loaded into the equation (constituting market capitalization) amounts to \( E = 167.50 \text{ billion} \).

The time until expiry of the implicit put option contract (the period 1 January 2000 to 16 September 2008) consists of 3,181 days. Converted into an annual multiple, the variable’s value is \( T = 8.7151 \).

Now that all necessary inputs have been estimated, we can calculate the value of the implicit put option based on the above data:

\[
g = B e^{-rT} - E = 182.3656 e^{-0.032977 \times 8.7151} - 167.50 = -30.6867 \text{ [billion]}
\]

Since an option cannot be priced below null [Chance and Brooks 2009:74], the conclusion is that the right of shareholders of AIG to place the financial conglomerate in the hands of the state had zero value on 1 January 2000, provided the earlier assumptions hold. In other words, the status of being “too big to fail” did not add value for shareholders.

Naturally, the framework exhibits a number of vulnerabilities. Among the possible stumbling blocks are the following:

- The concept assumes that the option contract is agreed at a certain date for a fixed period, known to the counterparts – conditions which are in reality not fulfilled.
- The choice of the start and end date is arbitrary.
- It is postulated that the call option is priced at null, whereas such a right may be of use to sovereigns in times of crisis, when nationalizations might prevent the inflicting of social costs on the society [Crivelli and Staal 2009:2].
- Frictions, which gain significance under conditions of market disruption, may distort empirical outcomes of the theoretical considerations.

In order to examine the volatility of the option’s value, and mitigate the defect of arbitrary choice of the beginning of the contract, it is possible to analyze the impact of the chosen start date on the estimated worth of the bailout option. This eventually means that the implicit put shall be priced over its maturity period, rather than at just one point on the timeline.
Dynamic analysis of the “bailout parity” with regard to the “start date factor”

In order to test the dynamics of the equation with reference to the start date, it shall be assumed that each day during the period – 1 January 2000 to 15 September 2008 – could have been the beginning of the implicit option contract. Thus, the theoretical parity value of placing AIG with the U.S. Government shall be estimated over the above-mentioned period. The risk-free rate will be computed separately for each period, using the above methodology based on the effective daily federal funds rate. The valuation shall also be conducted for non-trading days, in order to allow for a continuous measurement. To provide sufficient data for uninterrupted modelling, the last closing figures are to be used in the case of non-trading days. Eventually, a series of “g” values of the put option is computed. The calculations are plotted on the chart 6.

EXHIBIT 6. Theoretical value of the put option for AIG, depending on the start date of the implicit guarantee (in U.S. dollars)

Source: own calculations based on data for effective federal funds rate and historical AIG market capitalization (as of closing prices) from, respectively, www.federalreserve.gov accessed on 4 June 2012 and Bloomberg accessed on 12 June 2012.
As stated earlier, an option’s price does not turn negative. Therefore, the next chart presents pricing of the put (rather than its theoretical value).

**EXHIBIT 7. Price of the implicit put option for AIG, depending on the start date of the implicit guarantee (in U.S. dollars)**

Source: own calculations based on data for effective federal funds rate and historical AIG market capitalization from, respectively, www.federalreserve.gov, accessed on 4 June 2012 and Bloomberg, accessed on 12 June 2012.

**Findings of the dynamic “start date factor” analysis**

Based on the above exhibit, the following remarks might be made:
- The value of the implicit put option is not constantly positive over time.
- The pricing of the option turned positive a number of times prior to the 2008 bailout.
- Mounting problems of AIG were reflected by the surging value of the “g” as of summer 2007 (so the implicit put gained value for shareholders in the wake of distress).

The dynamic analysis of the modified Call–Put Parity equation, with regard to the start of the implicit put option on AIG, indicates that shareholder value attribution of government guarantee option contracts may be subject to significant variation over time. In the case of the 2008 bailout, the underlying option price tended to surge ahead of the provision of state aid. Due to this feature (if applied prospectively), the measure
may become an early-warning indicator of cumulation of distortion factors, with reference to the earlier-mentioned “time dimension” of systemic risk. Finally, not every spike in the pricing of the implicit option must yield a distress situation and trigger exercising of the put.

**Suggestions for further research**

The Call-Put Parity logic intuitively seems to correspond with the positions of shareholders of financial institutions and bailout decision makers faced with the “too big to fail” dilemma. That is the reason the framework was employed for the valuation of put options, which give owners of systemically important firms an opportunity to place the entities in the hands of state authorities. The outcome of empirical research – conducted on the example of the 2008 bailout of AIG – outlined that the underlying right is not value-creative to shareholders at all times (from the point of view of option pricing). As indicated above, framework constraints might affect the result. More conceptual work is required to refine the parity equation by relaxing several simplifying assumptions. Specifically, further considerations on the assumed null value of the government's call option are still warranted. The concept also ought to be tested on a greater number of bailout cases.

**Policy implications**

Based on an understanding of the determinants of moral hazard related to implicit state guarantees, policy responses might become better tailored for facilitating the causes of distress within the financial industry. Rather than concentrating on symptoms of systemic crises, relevant authorities may in the future be able to address the distortions of the market players’ incentives structure in order to prevent the build-up of systemic imbalances. The above study is a proposition for understanding the logic of a government bailout commitment from the shareholders’ perspective. The modified Call-Put Parity formula, and related findings of the empirical research, may be further used for back-testing cases of “too big to fail” bailouts. Ex-ante application of the concept might be made possible based on additional data provided by financial intermediaries as part of their “living wills” [Avgouleas, Goodhart and Schoenmaker 2010:2], especially as far as potential bailout costs are concerned. This could help make the scheme applicable for prognostic purposes.
Note

1 For similar benchmark-setting solutions (with reference to an interest rate swap example) [Hull 1999:167]. References

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Application of Call-Put Parity for Modeling the Value of Implicit Put Options…

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Abstract

The article outlines the issue of moral hazard related to implicit state guarantees for so-called “too big to fail” financial institutions in the context of Call-Put Parity. Shareholders of the involved entities and state decision makers are presented as counterparts of an implicit put option contract. By modifying the original parity equation, a formula is developed for quantifying the value to investors of a state bailout pledge. An empirical example is presented, based on data concerning the 2008 rescue of American International Group.

The study finds that pledges of state support do not always yield value for equity holders. Furthermore, the price of the put option may become subject to significant variation over time. Finally, in the case of AIG, the underlying implicit contract significantly gained in value prior to disclosure of the company’s distress.

Keywords: moral hazard, too big to fail, call-put parity, systemic risk
Appendix 1

EXHIBIT 8. Theoretical value boundaries of the American-style put option for AIG, depending on the start date of the implicit guarantee (in U.S. dollars)

EXHIBIT 9. **Price boundaries of the American style implicit put option for AIG, depending on the start date of the implicit guarantee (in U.S. dollars)**

Source: own calculations based on data for effective federal funds rate and historical AIG market capitalization from, respectively, www.federalreserve.gov (accessed on 4 June 2012 and Bloomberg, accessed on 12 June 2012).
The Significance of Small and Medium Enterprises in the Russian, Polish and British Economies

Introduction

The purpose of this paper is to examine the importance of the SME sector for the economies of Great Britain, Poland and Russia. A similar comparison cannot be found in the current literature on the subject. This results from the fact that the Russian statistical office has been conducting SME statistics similar to the standards of Western European countries for only a few years\(^1\). In addition, the economic conditions in which SMEs operate are very diverse, not only in terms of the continent or country but also in terms of the region and local environment. It is possible that small and medium enterprises can be structurally heterogeneous and sometimes completely different in particular areas [Commission of the European Communities, 2008]. For this reason, despite the considerable body of research regarding SMEs, there are significant deficiencies in many areas of knowledge about them [Gibb, 2000]. Based on the economic-social transformations that took place across the centuries, it can be assumed that small and medium enterprises will play the most important role in the British economy and then in the Polish and Russian economies. This hypothesis will be verified on the basis of calculating an indicator that was designed to compare the significance of SMEs in the economies of the surveyed countries.

Theoretical framework of SMEs

The definition of SMEs will be a subject of discussion in this part of the paper. They constitute, on average, 99.8% of all companies in highly developed countries and employ 75% of all employees [Poznanska, 1998]. Defining the term “small and medium enterprises” is extremely difficult because of a number of factors affecting this issue. Therefore, it seems justified to apply a complex approach in which the achievements of not only economics but also law, sociology, psychology or other scientific fields may be concerned.
Two basic approaches may be distinguished to differentiate SMEs from other forms of entrepreneurship: quantitative and qualitative. Quantitative definitions relate to the number of employed persons, the volume of sales and the level of revenue. Qualitative definitions are created on the basis of such categories as the manner of managing a company or making decisions. In practice, several criteria are usually applied simultaneously.

A significant contribution to the theory of SMEs has been made by the British Bolton Report (1971), which contained both the quantitative and qualitative criteria for dividing companies (see Table 1). Its definition had a statistical as well as economic dimension [Piasecki, 2002].

<table>
<thead>
<tr>
<th>TABLE 1. Selected definitions of SMEs presented in the Bolton Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Production</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Retail sales</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Transport</td>
</tr>
<tr>
<td>Catering</td>
</tr>
</tbody>
</table>

Source: Prepared by the author on the basis of [Piasecki, 2002].

The United States was another precursor in precisely defining the SME sector. The U.S. Small Business Administration (SBA) recognized that a small enterprise should have two characteristics: autonomy with regard to management and lack of dominant position in its trade. SBA identified the sector of small and medium business as presented in Table 2 [Poe, 1986].

<table>
<thead>
<tr>
<th>TABLE 2. Selected definitions of SMEs presented by SBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Retail trade</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Wholesale</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Production</td>
</tr>
</tbody>
</table>

Mixed criteria were used in the above definitions, as in the Bolton Report. However, it is worth noting how the size of the US market affects the classification with regard to the size of employment. A production company employing 300 people will be a large business in the UK, but will remain within the SME sector in the USA.

To sum up, there is no single definition that would aptly define small and medium enterprises. The dynamics of conducting business activity makes them heterogeneous in terms of regions, countries and continents. History and culture shaped contemporary economies in a diverse manner. Thus, the present state of affairs concerning SMEs is justified in some sense. The world is subject to constant changes and, as Bill Gates rightly observed, throughout the nearest decades, business worldwide will be subjected to unprecedented transformations [Gates, 1995]. It can be expected that new definitions and attempts at classifying SMEs will appear along with the changing economic environment.

The SMEs sector in the United Kingdom

Basic information about the UK economy in 2007–2009 is presented in Table 3.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (thousands)</td>
<td></td>
<td>60 975</td>
<td>61 280</td>
<td>61 525</td>
</tr>
<tr>
<td>GDP dynamics (%)</td>
<td></td>
<td>2.6</td>
<td>0.7</td>
<td>−4.4</td>
</tr>
<tr>
<td>Level of GDP (billion USD)</td>
<td></td>
<td>2 800</td>
<td>2 680</td>
<td>2 198</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td></td>
<td>35 512</td>
<td>36 358</td>
<td>35 165</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td></td>
<td>5.4</td>
<td>5.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Level of inflation (%)</td>
<td></td>
<td>2.3</td>
<td>3.6</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund.

Great Britain creates very beneficial conditions for conducting a business activity. The Doing Business 2010 report published by the World Bank classifies this country as in fifth position in terms of providing a good environment for the development of business [The World Bank, 2010].

Two types of classification are used to define SMEs. The first has been applied throughout the European Union (EU) as of 01 January 2005 (see Table 4). The second was suggested by the Department of Trade and Industry (see Table 5).
TABLE 4. Definition of SMEs in EU from 01 January 2005

<table>
<thead>
<tr>
<th>Size of company</th>
<th>No. of employees</th>
<th>Net turnover or balance sheet sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>&lt; 250</td>
<td>≤ 50 million EUR or ≤ 43 million EUR</td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 50</td>
<td>≤ 10 million EUR or ≤ 10 million EUR</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt; 10</td>
<td>≤ 2 million EUR or ≤ 2 million EUR</td>
</tr>
</tbody>
</table>


The above definition distinguishes small and medium enterprises on the basis of three criteria: level of employment, net turnover and balance sheet sum. This classification separates microenterprises, which usually constitute a majority of the whole SME sector.

TABLE 5. Definition of SMEs determined by UK’s Department of Trade and Industry

<table>
<thead>
<tr>
<th>Size of company</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>from 0 to 9</td>
<td>from 10 to 49</td>
<td>from 50 to 249</td>
<td>above 249</td>
</tr>
</tbody>
</table>

Source: Krawczyk, 2009.

The definition of SMEs that results from the Companies Act is used less frequently in the UK [Mikolajczyk, 2007]. For this reason, only the two most common classifications of small and medium enterprises were presented. It is worth pointing out that the Department of Trade and Industry defines SMEs only on the basis of the employment level.

The largest number of SMEs appeared in United Kingdom at the turn of the 1980s. A decade later, as a result of reducing government support, interest in business activity gradually grew weaker [Burns, Dewhurst, 1996]. However, a constant growth in the number of SMEs may be noted since the UK introduced statistics concerning them. The more detailed information about the UK’s SME sector is presented in Table 6.

In 2008, Great Britain had approximately 4.9 million SMEs, which constituted 99.8% of all companies. The sector of small and medium business employed more than 14.6 million people, which constituted 48.4% of the professionally active. Turnover of SMEs was about 1.5 billion GBP. All the listed indicators increased compared with the same period of the preceding year. At the same time, they reached the highest level since the introduction of such statistics (1994).

The dynamic development of SMEs in Great Britain is due primarily to active support of the state [Krawczyk, 2009]. The British Chambers of Commerce, Business Link, Health for Work Advice line for Small Business, Start Ups, Grant finder and Grants Online are among the institutions that actively help SMEs.
TABLE 6. **Number, employment and turnover of companies in the British economy** 
(2008, quantitative and percentage perspective, respectively)

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>No. of companies</th>
<th>Employment (k)</th>
<th>Turnover (mn GBP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>%</td>
<td>Quantity</td>
</tr>
<tr>
<td>Total including</td>
<td>4 871 290</td>
<td>100</td>
<td>30 154</td>
</tr>
<tr>
<td>SME</td>
<td>4 863 025</td>
<td>99.8</td>
<td>14 605</td>
</tr>
<tr>
<td>0–9</td>
<td>4 646 945</td>
<td>95.4</td>
<td>7 933</td>
</tr>
<tr>
<td>10–49</td>
<td>185 770</td>
<td>3.8</td>
<td>3 602</td>
</tr>
<tr>
<td>50–249</td>
<td>30 310</td>
<td>0.6</td>
<td>3 070</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 250</td>
<td>8 265</td>
<td>0.2</td>
<td>15 549</td>
</tr>
</tbody>
</table>

Source: Own study on the basis of the data from Department for Business, 2010.

Despite favourable conditions, British SMEs face the typical barriers of development for this sector. According to research, these are mainly the lack of a long-term operational strategy and insufficient market knowledge [Hutchinson, 2009]. However, it is claimed that interest in conducting individual business activity will increase along with the development of support programs for the SME sector. The market situation and the desire to manage free time, in particular by persons who undergo so-called “early retirement”, will support this phenomenon.

**The SME sector in Poland**

Basic information about the Polish economy in 2007–2009 is presented in Table 7.

TABLE 7. **Selected indicators of economic development in Poland**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (thousands)</td>
<td></td>
<td>38 121</td>
<td>38 123</td>
<td>38 111</td>
</tr>
<tr>
<td>GDP dynamics (%)</td>
<td></td>
<td>6.8</td>
<td>4.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Level of GDP (billion USD)</td>
<td></td>
<td>624 055</td>
<td>668 551</td>
<td>685 594</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td></td>
<td>16 371</td>
<td>17 537</td>
<td>17 989</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td></td>
<td>9.6</td>
<td>7.1</td>
<td>8.2</td>
</tr>
<tr>
<td>Level of inflation (%)</td>
<td></td>
<td>2.5</td>
<td>4.2</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, Eurostat.
The Doing Business 2010 report drawn up by the World Bank classifies Poland in 72nd position. The main problems for entrepreneurs are time-consuming procedures for starting a business activity and a complicated tax system [The World Bank, 2009]. In addition, the problems include an ineffective judicial system, excessive bureaucracy and a continuous struggle against corruption. They inhibit the full development of the private sector [Polska Konfederacja Pracodawców Prywatnych, 2009].

Two classifications are used in Poland to define SMEs. The first is used throughout the EU. The second is specified in the Act on Freedom of Economic Activity dated 02 July 2004 (see Table 8).

<table>
<thead>
<tr>
<th>Size of company</th>
<th>Number of employees</th>
<th>Net turnover or balance sheet sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>&lt; 250</td>
<td>≤ 50 million EUR or ≤ 43 million EUR</td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 50</td>
<td>≤ 10 million EUR or ≤ 10 million EUR</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt; 10</td>
<td>≤ 2 million EUR or ≤ 2 million EUR</td>
</tr>
</tbody>
</table>


The above definition is similar to that used in the EU. However, the notion of a microenterprise was introduced in Polish law for the first time.

SMEs had the greatest significance for Poland in the period of system transformations [Katrap, Strange, 2002]. In addition, they contributed to the increase of flexibility of the Polish economy and incorporated it into globalization and internationalization processes [Piasecki, 2002]. Detailed information on the size of the SME sector in Poland is presented in Table 9.

Microenterprises have the greatest share in the structure of Polish SMEs. They jointly employ over 3.5 million of the professionally active. Information about the size of the SME sector in the percentage perspective is presented below.

In 2007, there were 1.8 million SMEs in Poland, which constituted 99.8% of all companies. They employed more than 6.2 million people, which constituted 40.1% of all the professionally active. A characteristic feature of Polish SMEs is their regional diversity. Their smallest density can be found in eastern and northern Poland [Piasecki, 2002].

The country’s government also appointed a number of institutions whose task is a broadly understood support of the SME sector. Several organizations are worth mentioning: Polska Agencja Rozwoju Przedsiębiorczości (PARP), Krajowy System Usług (KSU), Fundusz Mikro and Akademickie Inkubatory Przedsiębiorczości (AIP).6

It may be assumed that interest in conducting an individual business activity in Poland will increase if several conditions are met. Firstly, the legal system should be sim-
TABLE 9. **Number, employment and turnover of companies in the Polish economy**
(2007, quantitative and percentage perspective, respectively)

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>No. of companies</th>
<th>Employment (000)</th>
<th>Turnover (bn PLN)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quant.</td>
<td>%</td>
<td>Quant.</td>
</tr>
<tr>
<td>Total including</td>
<td>1 777 076</td>
<td>100</td>
<td>8 969</td>
</tr>
<tr>
<td>SME</td>
<td>1 773 830</td>
<td>99.8</td>
<td>6 220</td>
</tr>
<tr>
<td>0–9</td>
<td>1 713 194</td>
<td>96.4</td>
<td>3 593</td>
</tr>
<tr>
<td>10–49</td>
<td>45 184</td>
<td>2.5</td>
<td>1 008</td>
</tr>
<tr>
<td>50–249</td>
<td>15 452</td>
<td>0.9</td>
<td>1 619</td>
</tr>
<tr>
<td>Other</td>
<td>3 246</td>
<td>0.2</td>
<td>2 749</td>
</tr>
</tbody>
</table>

Source: PARP, 2009, own study.

Simplified and the Labour Code should be adjusted to market requirements [Ministry of Economy, 2009]. Secondly, it is necessary to improve the procedures for obtaining funds from the EU as enterprises often do not apply for financial support only due to the burdensome bureaucratic procedures. Thirdly, the access to sources of financing for SMEs should be increased.

The SME sector in Russia

Basic information about the Russian economy in 2007–2009 is presented in Table 10.

TABLE 10. **Selected indicators of economic development in Russia**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (thousands)</td>
<td>142 000</td>
<td>142 000</td>
<td>141 391</td>
</tr>
<tr>
<td>GDP dynamics (%)</td>
<td>8.1</td>
<td>5.6</td>
<td>−7.5</td>
</tr>
<tr>
<td>Level of GDP (billion USD)</td>
<td>2 100 billion USD</td>
<td>2 265 billion USD</td>
<td>2 126 billion USD</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td>14 766 USD</td>
<td>15 948 USD</td>
<td>15 039 USD</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>6.6</td>
<td>6.5</td>
<td>8.9</td>
</tr>
<tr>
<td>Level of inflation (%)</td>
<td>9</td>
<td>14.1</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Source: IMF, CIA World Factbook.
The Doing Business 2010 report classifies this country in 120th place with regard to providing a favourable environment for the development of business. The largest difficulties for entrepreneurs are ineffective laws and complicated procedures related to international trade [The World Bank, 2009].

SMEs in Russia are defined by two legal acts: the Act dated 24 July 2007 ‘On the development of small and medium enterprises in the Russian Federation’ and the Provision of the Government of the Russian Federation ‘On the maximum level of revenue from the sale of goods (work, services) for each category of subjects of small and medium enterprises’ dated 22 July 2008. Both classifications are presented in Table 11.

**TABLE 11. Definition of SMEs based on legal acts of the Russian Federation**

<table>
<thead>
<tr>
<th>Size of company</th>
<th>Number of employees</th>
<th>Net turnover (million RUB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>≤ 250</td>
<td>≤ 60</td>
</tr>
<tr>
<td>Small</td>
<td>≤ 100</td>
<td>≤ 400</td>
</tr>
<tr>
<td>Micro</td>
<td>≤ 15</td>
<td>≤ 1000</td>
</tr>
</tbody>
</table>

Source: Постановление Правительства Российской Федерации, 2008.

Article 4 of the Act dated 24 July 2007 defines one more criterion, which applies only to legal persons which aspire to using public aid for SMEs. The total share of the Russian Federation, regional and central state authorities, foreign legal persons, foreign residents, public, religious, charities, organizations (associations) and other funds in the initial capital of an enterprise should not exceed 25%\(^{10}\).

The emergence of SMEs in Russia is considered one of the most beneficial results of economic reforms. Due to small companies, many socio-economic problems which constituted the barriers of the country’s further development were solved. Simultaneously, medium enterprises became one of the strategic and the most important sectors of the Russian economy [Ресурсный центр малого предпринимательства, 2001]. Information about the size of the SME sector in Russia is presented in Table 12.

It is worth noting that microenterprises are the largest group of companies among SMEs, just like in Poland and Great Britain. Information about the size of the SME sector in the percentage perspective is presented below.

In 2008, there were 3.9 million SMEs in Russia which constituted 96.1% of all companies. Their joint employment level was more than 50 million people which constituted 72% of the professionally active. The sector of companies in Russia was analyzed in a slightly different manner than in Great Britain or Poland for many years. A division into two groups was usually made: the first related to one-man companies, micro and small
companies, and was described as „small business”. The second group included both large and medium enterprises. This division determined the conduct of statistics and influenced a lower level of interest in medium business as a separate form of business activity. 

SMEs are the most rapidly developing sector of the Russian economy. The sector is influenced by the expanded structure of institutions supporting it [WIPO-KPO-KIPO, 2009]. Several are worth mentioning: Retail-Manufacturing Chamber of the Russian Federation, Association of Producers and Entrepreneurs, Opora Russia, Russian Association for the Development of SME, Russian Business Portal Alians Media, and the web portal Innovation and Entrepreneurship.

Despite complicated conditions for conducting business activity, the number of Russian SMEs is constantly increasing. It can be assumed that continuous simplification of legal procedures and the policy of diversifying the economy introduced by the Russian government will contribute to the further expansion of the SME sector.

The significance of the SME sector in the examined economies

In order to compare the significance of the SME sector in Great Britain, Poland and Russia, an indicator (W) has been designed. The indicator will consist of seven components. The first three relate to the share of SMEs among all companies and in creating a given country’s GDP. The next three examine the impact of small business on employment. The last component verifies to what extent the government supports SMEs with funds from the state budget.
The methodology of counting particular components will be presented using the example of component “a”, which will be calculated based on the criterion of percentage share of SMEs in all companies.

Component “a” assumes the maximum value (10 points) for Great Britain and Poland because these countries have the highest value of the examined criterion. For Russia, it has been calculated as follows:

\[ a = \left( \frac{96.1}{99.8} \right) \times 10 = 9.63 \]

Therefore, the point of reference is a country with the highest value of a given criterion (Great Britain, Poland = 99.8%).

The indicator is expressed by the formula:

\[ W = \left( \frac{a + b + c + d + e + f + g}{70} \right) \times 100\% \]

where:

- a – share of SMEs in all companies
- b – share of SMEs in total turnover of companies
- c – share of SMEs in GDP
- d – share of SMEs in employment
- e – number of SMEs per 1000 professionally active people
- f – number of jobs in SMEs per 1000 residents
- g – value of expenses from state budget per one SME

The indicator is a percentage share of the sum of points received by a given country as compared to the general number of points to be obtained (7 components, 10 points each = 70 points). The number obtained will denote to what extent SMEs are significant in the economy of the surveyed countries. The components of the indicator will be subsequently calculated and discussed below.

The percentage share of SMEs in Russia is slightly less compared with Great Britain and Poland (see Table 13). This state of affairs is a consequence of the economic changes that have occurred over the last decades. Table 14 presents another component of the indicator.

### TABLE 13. Percentage share of SMEs in all companies

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>share in companies</td>
<td>99.8</td>
<td>99.8</td>
<td>96.1</td>
</tr>
<tr>
<td>value of component a</td>
<td>10</td>
<td>10</td>
<td>9.63</td>
</tr>
</tbody>
</table>

Source: Calculated by the author.
TABLE 14. Percentage share of SMEs in total turnover of companies

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>share in turnover</td>
<td>48</td>
<td>59.1</td>
<td>45.9</td>
</tr>
<tr>
<td>value of component b</td>
<td>8.12</td>
<td>10</td>
<td>7.77</td>
</tr>
</tbody>
</table>

Source: Calculated by the author.

According to Fortune magazine, the largest number of global companies can be found in Great Britain (34), slightly fewer in Russia (5) and the smallest number in Poland (PKN Orlen ranked 477th in the ranking). The high share of SMEs in the turnover of Polish companies may thus result from the lack of competitors of international range. The different situation in Great Britain and Russia may be a consequence of the presence of powerful fuel suppliers (British Petroleum, Gazprom, Lukoil, Rosneft).

SMEs in Russia have the smallest share of the three countries in creating GDP (see Table 15). This situation may result from the structure of the country’s economy, which is dependent on the export of raw materials [Pikula, 2010]. Their production is usually the domain of large companies. This fact results from the need to provide an appropriate infrastructural, technological, capital and base.

TABLE 15. Percentage share of SMEs in GDP

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>share in GDP</td>
<td>50.4</td>
<td>47.4</td>
<td>17</td>
</tr>
<tr>
<td>value of component c</td>
<td>10</td>
<td>9.4</td>
<td>3.37</td>
</tr>
</tbody>
</table>

Source: Own study on the basis of data from: PARP, 2008, Министерство экономического развития Российской Федерации, Department for business innovation and skills.

The smallest share of the SME sector in the total level of employment in Great Britain (see Table 16) may result from the large number of international companies on the domestic market. Apart from global financial institutions (HSBC, Barclays, Aviva, HBOS), a significant number of jobs is provided, e.g. by supermarket chains (Tesco, Marks & Spencer, J. Sainsbury, Wolseley) and other large companies (British Telecom, National Grid, British Airways). The greatest share of SMEs in the total level of employment in Russia is due mainly to medium-sized businesses, which generate more than 63% of jobs in the SME sector. In Poland, a similar role is played by businesses with employment up to 9 people.
TABLE 16. **Percentage share of SMEs in employment**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>share in employment</td>
<td>48.4</td>
<td>69.3</td>
<td>71.6</td>
</tr>
<tr>
<td>value of component d</td>
<td>6.76</td>
<td>9.69</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Calculated by the author.

According to the Table 17, the largest number of SMEs per 1000 professionally active people can be found in Great Britain and the smallest number in Russia. However, it is worth pointing out that these data do not take into account the aspect of the SME structure which is different in the case of both countries.

TABLE 17. **Number of SMEs per 1000 professionally active people**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of SMEs</td>
<td>4 863 025</td>
<td>1 773 830</td>
<td>3 959 181</td>
</tr>
<tr>
<td>professionally active</td>
<td>30 890 000</td>
<td>16 860 000</td>
<td>75 100 000</td>
</tr>
<tr>
<td>number of SMEs/1000 of the professionally active</td>
<td>157</td>
<td>105</td>
<td>53</td>
</tr>
<tr>
<td>value of component e</td>
<td>10</td>
<td>6.68</td>
<td>3.35</td>
</tr>
</tbody>
</table>

Source: Own study on the basis of CIA World Factbook 2008.

The above employment criterion (see Table 18) takes into account the previously discussed issue of the structure of companies in the economy. SMEs in Russia generate more jobs per one thousand residents than SMEs in Great Britain or in Poland. However, it is worth mentioning that this criterion is not entirely objective. This is because the information about the SME sector has been taken from the data of national statistical offices (UK National Statistics, GUS, Rosstat) which use different methodologies for counting particular indicators.

The difference in state budget expenses for SMEs in Great Britain and other countries is enormous (see Table 19). This situation may be due to the following reasons. First, the data in the case of Poland and Russia relate to the quantity of funds that are allocated directly from the state budget. On the other hand, in Great Britain, the quoted statistics are only based on analyzes of external experts. Second, the manner in which state expenses are classified as those that reach SMEs is important. These can be not only subsidies or tax relief but also expenses for the construction of a research...
**TABLE 18. Employment in SMEs per 1000 professionally active people**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>total number of jobs in SMEs</td>
<td>14 605 000</td>
<td>6 220 000</td>
<td>50 771 000</td>
</tr>
<tr>
<td>professionally active</td>
<td>30 890 000</td>
<td>16 860 000</td>
<td>75 100 000</td>
</tr>
<tr>
<td>number of jobs in SMEs/1000 of the professionally active</td>
<td>473</td>
<td>369</td>
<td>676</td>
</tr>
<tr>
<td>value of component f</td>
<td>6.99</td>
<td>5.46</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Calculated by the author.

**TABLE 19. Value of expenses from state budget per one SME (EUR)**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>total expenses on SMEs</td>
<td>8 109 606 184.816</td>
<td>88 680 493.4</td>
<td>90 889 040.1</td>
</tr>
<tr>
<td>expenses per one SME company</td>
<td>1668</td>
<td>50</td>
<td>23</td>
</tr>
<tr>
<td>value of component g</td>
<td>10</td>
<td>0.3</td>
<td>0.01</td>
</tr>
</tbody>
</table>


**TABLE 20. Indicator of significance of SMEs in the economy**

<table>
<thead>
<tr>
<th>Component</th>
<th>Great Britain</th>
<th>Poland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>10</td>
<td>9.63</td>
</tr>
<tr>
<td>B</td>
<td>8.12</td>
<td>10</td>
<td>7.77</td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>9.4</td>
<td>3.37</td>
</tr>
<tr>
<td>D</td>
<td>6.76</td>
<td>9.69</td>
<td>10</td>
</tr>
<tr>
<td>E</td>
<td>10</td>
<td>6.68</td>
<td>3.35</td>
</tr>
<tr>
<td>F</td>
<td>6.99</td>
<td>5.46</td>
<td>10</td>
</tr>
<tr>
<td>G</td>
<td>10</td>
<td>0.3</td>
<td>0.01</td>
</tr>
<tr>
<td>maximum number of points</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>number of points obtained</td>
<td>61.87</td>
<td>51.53</td>
<td>44.13</td>
</tr>
<tr>
<td>value of indicator</td>
<td>88%</td>
<td>74%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: Calculated by the author.
centre, which provides research infrastructure for small and medium enterprises. However, all data listed in the table were accepted by official state authorities. Therefore, it should be assumed that these are reliable values, although they probably include other spheres of aid for SMEs. The analysis of data in the table provides a certain perspective as to the extent to which small business is supported in the surveyed countries. Even if aid funds from the British budget are one-tenth of those presented in the table, the difference in financing British SMEs as compared to Polish and Russian ones is still significant.

The total value of the indicator on the basis of its components has been calculated in Table 20.

According to Table 20, the indicator assumes the highest value for Great Britain (88%). The next place is held by Poland (74%), and then Russia (63%) comes in third. The described results confirm this that SMEs are the most important in the economies of Great Britain, Poland and Russia, respectively.

Conclusions and recommendations

The following conclusions may be drawn on the basis of the conducted analysis. Firstly, SMEs have the significance for the economy of Great Britain mainly because of their share in GDP and employment. In addition, they obtain the most financial aid from the government as compared with other examined countries. State support is also accessible through a high diversity of business organizations as well as free consulting services for start-ups. Secondly, SMEs in Poland are essential to the economy mainly due to their number and their share in the turnover of all companies. The network of institutions supporting small business is fairly expansive, although many organizations which are certainly helpful for SMEs in Great Britain are not available in Poland. Thirdly, SMEs in Russia constitute a great amount of enterprises, yet they are just starting to become more significant in the country’s economy. It is obvious that due to the territorial size of Russia, any socio-economic transformations will last longer than in the case of Poland or Great Britain. The importance of SMEs for the Russian economy results mainly from the amount of jobs created by this sector.

However, the above statements cannot be accepted uncritically. Firstly, the conclusion about the importance of SMEs results from analyzing an indicator based on very simplified methodology. It contains only several comparative criteria and many aspects have been omitted due to the lack of appropriate data (e.g. the share of SMEs in foreign trade) or other factors. Secondly, the data used in the process of comparative analysis do not have one source of origin and are calculated on the basis of diverse methodologies. Thus, it may be believed that what is important is not the value of the received significance indicator but the phenomenon it demonstrates. In other words, the differences in
the significance of the SME sector for the economies of the examined countries may be slightly smaller. This problem may be solved by using statistical information from one, independent source for each of the analyzed economies.

Great Britain has been the capital of European capitalism for dozens of years and its business traditions date back to the beginning of the 18th century. It is probably for this reason that the SME sector has the most significance in this country. It is strengthened by a state policy that actively supports SMEs, not only in financial matters but also with regard to consulting and many other services. However, many types of budget support bypass certain areas of the functioning of small business [Mole, Hatr, 2009]. This is another direction of research which may reveal whether money from the state budget really reaches the neediest companies.

The SME sector has expanded dynamically in Poland, especially since 1989. In that time, many barriers for private sector development were eliminated and the number of business entities increased. However, the pace of adjusting the state administration to systemic changes was insufficient to serve a large number of companies [Balcerowicz, 2009]. This produced a variety of bureaucratic problems affecting the small business environment in Poland that require further analysis [Przedsiębiorczość, 2009].

Based on the calculated indicator, the SME sector has the smallest significance for the Russian economy. This situation may change if the conditions for the functioning of companies change. It is especially important to activate all possible natural, material and human resources [Пехтерева, 2009]. The high technology sector, which currently enjoys special support from the government, may constitute a chance for Russia [Губанов, 2009]. This issue, among many others, is certainly worth advanced examination.

The development of SMEs may be enhanced by the preparation of a long-term strategy for small business, e.g. for a period of 20 to 30 years. A stable state policy towards the SME sector would provide entrepreneurs with the possibility to plan revenues and expenses in a long-term perspective. A similar strategy will certainly require continuous updating due to the dynamic character of the regional and worldwide economy. However, it would be important to sustain the major assumptions of the policy towards SMEs. The country that creates and consistently implements such a plan has a chance to create a modern and flexible economy.

Notes

The U.S. Small Business Administration – state administration authority financially and organizationally supporting the SME sector in the USA, American equivalent of Polska Agencja Rozwoju Przedsiębiorczości.

GDP presented in all tables is calculated according to purchasing power parity.

The website of the International Monetary Fund.


Definition relates to one financial year.

RUB – Russian rouble. As of 22 February 2010, these amounts are, respectively (from the top): 5.84 million PLN, 38.9 million PLN, 97.3 million PLN.

Own translation. In the original: Cуммарная доля участия Российской Федерации, субъектов Российской Федерации, муниципальных образований, иностранных юридических лиц, иностранных граждан, общественных и религиозных организаций (объединений), благотворительных и иных фондов в уставном (складочном) капитале (паевом фонде) указанных юридических лиц не должна превышать двадцать пять процентов.

Rosstat publishes separate statistics for one-man companies and for those which employ from 1 to 9 people. Data presented in the table refer to the sum of two groups of companies concerning number, employment and turnover.


Value of expenses converted according to the exchange rate from 31 December 2007 on the basis of data: http://www.oanda.com/currency/historical-rates (downloaded on 26 February 2010). Website with historical exchange rates.

Data from 2006.

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Abstract

The purpose of this paper is to examine an economic significance of the SMEs in the Russian, Polish and British economies. Initially, the theoretical as well practical background of the SMEs sector is presented for analyzed countries. Then, the comparison is based on the index composed with diverse variables related to business activity. Eventual results confirm an assumption that SMEs are of the most significance for British, Polish and Russian economies, respectively. Two contributions of this paper to the field are worth distinguishing. Firstly, the applied index has been devised exclusively for this research. Secondly, the scientific literature lacks a comparison of the SMEs sector between the examined countries.

Keywords: SMEs, small and medium enterprises, SMEs Russia, SMEs Poland, SMEs Great Britain, small business
Defining Prosumption for Marketing: Understanding the Nature of Prosumption after the Emergence of Internet-based Social Media

Introduction

This article aims to analyze mainstream and progressive academic literature in order to capture prosumption phenomenon definitions and its prevailing properties. A synthesis of relevant literature combined with a look at business practices will serve as means to reach the ultimate goal of this paper: to develop a clarified, theory-grounded, concise yet comprehensive prosumption definition.

The origins and evolution of prosumption

“Prosumption”, “co-production”, and “co-creation” are often used interchangeably in the literature. Those names are employed to identify the process of value-creating collaboration between consumers and producers. The term “prosumer” is made from “consumer” and “producer” to demonstrate the vanishing separation and to emphasize the diffusion between the two categories. Alternative explanations of the terms coupling into “prosumer” can be found in the music industry where “the term ‘pro-sumer’ also denotes a pro-fessional con-sumer” [Cole, 2011:452].

Occurrences of prosumption date much further back than the academic research of this phenomenon. Toffler was the first to use the term “prosumption” and he foretold “the rise of the prosumer” [Toffler, 1980:265] with the ability “to heal the historic breach between producer and consumer” [Toffler, 1980:11]. In the pre-industrial, agricultural era – “the First Wave” – neither producers nor consumers existed in the strict sense and the economy was based on prosumption. People usually produced just for their own consumption needs. With the advent of “the Second Wave”, the industrial revolution “[drove] a wedge into society, that separated these two functions, thereby giving birth to what we now call producers and consumers” [Toffler, 1980:266]. Toffler believes that with the post-industrial “Third Wave”, society is moving towards prosumption economics. He sees the prosumer as an agent of new civilization. Toffler’s definition of prosump-
tion is the most common in academic and popular literature, and as he is credited with the first use of the term, his work is cited in all major publications on the topic.

Drawing on Toffler’s rising prosumption concept, Kotler recognizes the phenomenon, but refuses to treat prosumers as anything more than a market segment [Kotler, 1986:513]. According to Kotler, prosumption needs to be noticed and addressed by marketers as it will increase over time for many reasons, e.g., a higher unemployment rate, the growth of labor costs, development of new technologies, the growing need for self-realization, and the quest for higher quality products and services. Prosumption is likely to occur in cases that “promise high cost saving, require minimal skill, consume little time and effort, and yield high personal satisfaction” [Kotler, 1986:511]. Kotler identified two main prosumer profiles: “Avid Hobbyists” (gardeners, cooks, home handymen), who would become producers in either their professional field or hobby domain, and ecology-oriented “Archprosumers”, who would aim to avoid mass production and mass consumption by producing their own food and clothing (Kotler, 1986:512). Overall Kotler agrees that Toffler “has raised some worth while issues for marketers to consider” [Kotler, 1986:513].

Caldwell et al., extending Toffler’s ideas for the purpose of their research, define prosumption as “[t]he act of adding personal value by customizing and then consuming an acquired entity” [Caldwell et al., 2007:95]. In the paper, they present a study of contemporary young females prosuming multiple gender role identities. The prevailing application of Toffler’s prosumption concept in literature is that of “a prosumer – who produces by consuming” [Bonsu et al. 2010:92].

Humphreys and Grayson critically analyze prosumption research that builds on Marx’s theories of “exchange value” and “use value”. The exchange value is the theoretical notion of the relative worth of a product “when placed in a value or exchange relation with another commodity of a different kind” [Humphreys, Grayson, 2008:965], i.e., when compared with other commodities on the market. The exchange value is approximated at sale, in turn the use value can be realized “only by use or consumption” [Humphreys, Grayson, 2008:965]. It represents the subjective worth of the product to the owner or the acquirer and is related to its usefulness and level of satisfaction. Humphreys and Grayson argue that profound changes in producer-consumer roles can be identified only in instances when the latter creates the exchange value. Consumers engaging to produce the use value do not represent significant changes in the traditional functions of customer, producer, and employee.

Talking about “the Second Wave”, Toffler makes a clear distinction between “production for use” and “production for exchange”, which were dominant in the agricultural and industrial ages respectively. He also identifies the two modes as two sectors in the economy: Sector A, comprising unpaid production for personal consumption, and Sector B, production for market exchange. Based on this presumption, Toffler restates his description of “the First Wave” when “Sector A […] was enormous, while Sector B was minimal” and “the Second Wave” as when “the reverse was true” [Toffler, 1980:266–267].
Humphreys and Grayson are not alone in relating prosumption phenomenon directly to Marxian ideas. Building on neo-Marxist theories of value and labor, and on Foucault’s governmentality ideas, Zwick et al. (2008) critically evaluate co-creation as a management technique. According to Zwick et al., “the ideological recruitment of consumers into productive co-creation relationships hinges on accommodating consumers’ needs for recognition, freedom, and agency” [Zwick et al., 2008:185]. They recognize co-creation as “the most appropriate mode of production in the age of post-Fordist fragmentation of demand” [Zwick et al., 2008:186]. In short, corporations should be putting their consumers to work for success.

A different approach to the notion of value in the producer-consumer relationship is taken in a study by Xie et al. (2008). The authors acknowledge the propensity to engage in the prosumption process and study motivational mechanisms of customers becoming co-creators. Xie et al. ground their research in the conceptual framework of the service-dominant logic of marketing [Vargo, Lusch, 2004]. Rejecting goods-dominant logic and taking on Vargo and Lusch’s value co-creation proposition, Xie et al. redefine prosumption as: “value creation activities undertaken by the consumer that result in the production of products they eventually consume and that become their consumption experiences” [Xie et al., 2008:110]. This definition is extended as compared to the classical one and incorporates the rationale for customer participation. Drawing on Vargo and Lusch’s work, Xie et al. imply that “value can only be created with and determined by the user in the ‘consumption’ process and through use” [Xie et al., 2008:110]. Thus the value-in-use emerges as an important pillar of prosumption [Humphreys, Grayson, 2008]. The other constituent is co-production, which “involves the participation in the creation of the core offering itself. It can occur through shared inventiveness, co-design, or shared production of related goods, and can occur with customers and any other partners in the value network.” Herewith Xie et al.’s definition of prosumption captures all agents engaged in the process, and does not limit the phenomenon to the two parties – producer on one side, consumer on the other.

Combination of the terms “consumer” and “producer” brought forth considerations about specific cases where one component’s features would outweigh the other, e.g., self-serving vegetables at a salad bar is less “producer”-intensive than writing a blog. In order to reflect these instances, Ritzer came up with an alternative concept: the conducer [Ritzer, 2009:1]. In this dual approach the name “prosumer” would be applied when the producer function was dominant, and “conducer” would be used when the opposite was true, i.e., the consumption was more important in the relationship. While Ritzer abandoned promoting the dual terminology concept, the underlying idea holds true. Nevertheless, it is the name “prosumption” that is gaining popularity and it is used to describe both types of situations.

The possible “rise of the prosumer” is widely debated in academic literature, but most of the researchers agree that contemporary market economies have seen the presence of producers, consumers, and that of prosumers. The prosumption phenomenon is
“growing significant enough to rival production and consumption in importance” [Comor, 2011:311 quoting Ritzer]. With the changes in the world economy since late 2007 – the great financial crisis – production and consumption have decreased, giving way to prosumption. As Ritzer and Jurgenson argue: “While the increasing preeminence of prosumption, and the growing attention to it, were not caused by the recession, the decline of both production and consumption, arguably, made space for greater scholarly interest in and concern with prosumption. There are signs that consumer (and producer) society is beginning to be challenged in importance by what might be called ‘prosumer society.” [Ritzer, Jurgenson, 2010:17].

Even if there is no agreement on the “rise of the prosumer” as Toffler has envisioned it, the trend is clearly visible: the prosumption phenomenon has emerged, changing the market scenery, and therefore economic organizations wishing to engage prosumers should re-visit their marketing strategies. “[B]oth mainstream and progressive analyzts conceptualize prosumption to be a liberating, empowering and, for some, a prospectively revolutionary institution” [Comor, 2011:309].

Prosumption definition commotion

Literature studies have shown that defining prosumption remains notoriously difficult and the variety of approaches taken by different authors makes understanding the core of phenomenon an uneasy task. Whatever the approximation is – the societal or industrial evolutionary theory, consumer perspective, producer perspective, value creation or co-creation theories, relationship marketing, value chain, network effects, do-it-yourself movement, Internet and social media development – research has not delved into what prosumption is. Organizing existing interpretations of the phenomena is an impossible task and prone to misunderstanding. Problems with conceptualizing it stem from its complexity, but researchers do agree that since the emergence and with the further development of Internet-based social media the nature of prosumption is evolving.

Prosumption 2.0

Prosumption in business terms is usually discussed in the literature under the themes of service-dominant logic of marketing [Vargo, Lusch, 2004] and value co-creation [Prahalad, Ramaswamy, 2000; Prahalad, Ramaswamy, 2002]. The emerging “service-dominant logic of marketing” rejects the traditional passive role of customers, viewing them as co-producers of services, actively participating in the exchange. This proposition influences the overall marketing process that should be realized in conjunction with the customer, who judges the value proposition on the basis of use value [Vargo, Lusch, 2004].
People were co-creating and participating in the production before the advent of Web 2.0. In USA the trend of putting customers to work accelerated in mid-1950s and demonstrated later on in various manners [Ritzer, Jurgenson, 2010], for example, being a waiter at the self-service fast-food restaurant, filling one's own gas tank at the gas station, using an ATM machine (being a bank teller), using a self-check-out counter at the supermarket (scanning tags, bagging goods, and paying with a credit card), checking-in at the airport or into a hotel in an electronic kiosk, performing do-it-yourself medical procedures (monitoring blood pressure or glucose, taking pregnancy tests), calling in to a radio show.

With the emergence of Web 2.0, prosumption is gaining importance and will accelerate. Internet culture, with its properties of consumer-centricity, openness, interactivity and interoperability, speed, individuality, and ability to socialize, share and collaborate in virtual communities, has empowered consumers to become prosumers. “[T]he consumer’s influence on value creation has never been greater, and it is spreading to all points in the value chain.” [Prahalad, Ramaswamy, 2002:3].

“It can be argued that Web 2.0 should be seen as crucial in the development of the ‘means of prosumption’; Web 2.0 facilitates the implosion of production and consumption” [Ritzer, Jurgenson, 2010:19]. Understanding the opportunities that Web 2.0 has opened for customers is pivotal for comprehending contemporary consumption models. Some of the Web 2.0 prosumption examples follow:

- social networks like LinkedIn, Facebook, Nasza-klasa, Golden Line, and MySpace where users interact for leisure and/or business;
- Wikipedia – an online encyclopedia where users are responsible for content (editing it, validating, etc.) and other wikis;
- blogs and microblogs (Twitter, Blip);
- online markets (e-Bay, Allegro);
- Flickr, YouTube, Vimeo for user content-sharing (photos, videos) and comments;
- The Linux operating system and other open-source software.

Not by accident, the above cases also exemplify a new paradigm in management: open innovation or “the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation” [Chesbrough, 2006, 2012:20]. Chesbrough (2012) believes that with open innovation practices intensifying – getting more engaging and collaborative, extending the number of participants (from customers, suppliers, and partners through third parties to whole communities) – the line between a company and its environment will blur in the future.

Von Hippel also perceives acceleration of similar trends and announces: “users will be an increasingly important source of innovation and will increasingly substitute for or complement manufacturers’ innovation-related activities” [von Hippel, 2005:14].

Creating economic value in such instances results mainly from the ability to put customers to work (and keep them engaged), thus effectively melting production and consumption into the prosumption process [Zwick et al., 2008:180]. According to The
New York Times, Facebook’s valuation is expected to top up to 100 billion USD by the initial public offering in 2012. With such an acknowledgement in mind, it is clear that economic organizations should recognize the value of productive consumption (in case of Facebook the prosumption output is information).

Beer and Burrows (2007) argue that Web 2.0 is “a process of cultural digitization that is moving faster than our ability to analyze it”. They see new relationships emerging as a result; their research implies “the changing relations between the production and consumption of Internet content”. Beer and Burrows suggest that these relationships will grow in importance and become a vital part of everyday life.

Prosumption in Web 2.0, like its traditionally perceived form, received academic critique. Comor (2011) argues that only the most creative and wisest prosumers can find co-creation appealing and rewarding, but even they are being pulled into exploitation and alienation, while the average prosumer is alienated to a much greater extent. Prosumers are accused of reproducing their alienation and possessive individualism, and the prosumption process is faulted for creating hegemonic institution focused on commodity constructs. Toffler’s vision that “[t]he fantastic prosumer [largely unchallenged by activists] is indeed a fantasy” is still unchallenged in capitalist relations and mediations [Comor, 2011:323].

Some authors foresee problems that Internet-based prosumption may induce. Web 2.0 “architecture of participation” has become a repository for large quantities of user-generated content – content that is often made from copyrighted materials, and thus has become an area of conflict between prosumers and copyright owners [Collins, 2010:37]. Other possible sources of conflict are privacy issues.

Although prosumption was not invented on Web 2.0, it can be argued that it found its most convenient place there. Web 2.0 serves as “means of prosumption” [Ritzer, Jurgenson, 2010:19] and facilitates the process through massive involvement of users. Web 2.0 users build social networks on-line; they seek contact with other users to engage, interact, exchange experience and information, thus automatically creating fertile soil for the prosumption activities to germinate and grow.

**Prosumer characteristics**

Sociological and technological changes in the 21st century influence consumers’ environment and characteristics, giving way to new behavior patterns. There is a shift in the way people think, what their needs are, and how they work, communicate or travel, giving way for prosumption to prevail. Euro RSCG Worldwide’s “The Second Decade of Prosumerism” report (2011) investigates prosumer attributes. Since Internet social media has become mainstream, prosumers have access, anytime and anywhere, to available platforms to share, create and experience. Internet media are dynamic and
allow the user to generate content. The report analyzed different attitudes and prosumer behaviors, discovering distinctive motivations that allowed for segmentation. The following five subgroups were identified: utilitarians, entertainers, advocates, co-creators, and competitors driven by: good bargains, pleasure and having fun, a quest to change the world, cooperation and connection, and status respectively. Interestingly, despite the globalization trends, there are significant differences from country to country. The most common prosumer types in the UK are advocates (34%) and entertainers (24.5%), while in the USA entertainers (31.7%) and co-creators (25.3%) dominate, and French prosumers are mostly competitors (34%) and entertainers (25%).

In general, prosumers are proactive consumers who use Internet technology and access to information to extensively engage in activities of their interests. While prosumers are diverse, they share certain characteristics: they are early-adopters open to innovation, are very engaged, share their experiences and seek information from others, often become opinion leaders, value recognition, respect, and rewards, and are critical and independent thinkers. Prosumers with the skills to fully take part in the prosumption process may be in the minority now, but this is going to change in less than a decade when Internet-savvy youngsters become active market participants.

Managing prosumption in contemporary business practice

The proliferation of Internet-based social media has created unprecedented opportunities for companies to connect with their customers, increasing the scope and the scale of cooperation between them and allowing for new business models to emerge based on managing experiences of on-line communities. Three diverse cases of companies that have embarked upon the prosumption process as the core of their businesses follow.

Technical advances like development of Internet bandwidth and accessibility, and three-dimensional graphics, have led to the emergence of virtual worlds. The first case – Second Life – was chosen as the most prominent example of such a platform. The next one – LEGO’s Mindstorms – proves that it does not take the computer business in its traditional meaning to be able to capitalize on prosumption. And finally, the latest Threadless example will demonstrate that it does not even require a company to excel at technology in order to become successful in the prosumption process. Just the opposite – the enterprise may thrive at co-production with customers of low-tech, common products.

Second Life in the virtual world. The virtual world is a computer-generated physical space, represented in three-dimensional graphics, which can be experienced by many users simultaneously. By definition it allows “real-time, media-rich, and highly interactive collaboration between companies and consumers” and is based “on a new mode of production where the host firm facilitates unrestrained consumer freedom and empowerment” [Kohler et al., 2011:774].
Headquartered in San Francisco, CA Linden Research Inc. (doing business as Linden Lab) was founded in 1999 by Philip Rosedale (on the Board of Directors today) who has led the creation of the company’s most famous product – the virtual world of Second Life. Named a Time magazine “Coolest Invention of 2002” and advertised as a revolutionary form of shared three-dimensional massive multi-player entertainment, it was launched on June 23, 2003. Second Life has become the most popular virtual world, with 28.3 million user accounts from all over the globe registered as of March 11, 2012.

The Second Life world was originally developed and structured by Linden Lab, but its residents were invited to co-create the virtual reality, socialize with others, play games, share the content, launch businesses, shop, educate, and enjoy themselves. In order to enter the virtual world, participants have to download and install free open-source software, i.e. Second Life Viewer, run the program and login with their avatar’s name and password. The avatars visualize the players in virtual world and allow them to be whoever or whatever they wish – human, animal, plant, mineral or mix – and change their form of appearance as they wish. The majority of residents choose free basic accounts, but there are also premium memberships available providing bonuses. Inside Second Life there are multiple engaging opportunities. The platform allows for experimentation – trying different new identities, flying, teleporting – but players actually seek products and experiences resembling real-life ones. Participants carefully conceptualize their Second Life. Residents freely design their own individual “worlds” on the platform, building their virtual self: their housing, furniture, cars, clothing, looks – literally anything they can imagine – and trade their designs with others. Members also organize themselves around their interests and activities. The success of Second Life attracted real businesses, creating even more opportunities for residents in variety of fields like education (most major US and some UK universities have campuses in the virtual world offering courses and conducting science research projects), arts (happenings, performances, exhibitions, theatre, live music concerts), and religion. Institutions (libraries, embassies, government organizations, banks, companies) open their offices and retailers operate their stores in Second Life.

As a result Linden Lab has created the world’s largest user-generated virtual goods economy – a marketplace where Second Life residents trade whatever they can imagine, hundreds of millions of products and services. They buy and sell paying with virtual Linden dollars, which can be converted into real currencies, allowing participants to spend and earn money. According to Linden Lab, from inception to June 2010, Second Life members have spent more than 1 billion user hours in the virtual world and generated more than 1 billion USD in user-to-user transactions. Just in the third quarter of 2010, over 750,000 unique residents exchanged more than 150 million real USD in the Second Life economy. The current exchange rate on March 11, 2012 was 1 USD to 201–208 Linden dollars.

Overall Second Life is an example of a virtual world that has been leveraged for real world benefits shared by all participants and its creators.
Mindstorms. LEGO Group\textsuperscript{11}, headquartered in Billund, Denmark, was founded in 1932 and is a privately owned company of the Kirk Kristiansen family. The immediate association for the LEGO trademark is a simple interlocking plastic brick that in its current form has been produced since 1958, but LEGO has embraced notions of imagination, playfulness and creativity as its brand values in order to fulfill its customers’ needs to develop new ideas and be active together.

In 1998 LEGO launched the first series of Mindstorms with the Robotic Invention System, and in 2006 it released Mindstorms NXT, the product that led the company from being consumer-centric to prosumer-centric. LEGO Mindstorms NXT is a set of building parts with a micro-computer NXT brick as the central piece that allows users to build their own robots and program them to do whatever they wish. NXT is the “brain” of the Mindstorms robot which allows it to operate and perform different tasks. The robots can be equipped with motor controls and additional light, sound, color or touch sensors and easily programmed. Mindstorms NXT box contains a CD with user-friendly software and drag-and-drop programming, but LEGO encourages creativity by making the source code open for downloading, modifying, and sharing. The most impressive robot creators are recognized and rewarded at numerous contests organized by the LEGO Group. LEGO shares manuals on how to build some robots, but an inexhaustible number of downloadable instructions by fans are available on-line. These collections include machines and humanoids, such as Sudoku Solver – a robot that examines Sudoku puzzles and solves them; Domino Builder, which can arrange domino bricks; Rubik’s Cube Solver that automatically puts together the famous cubes; robot weather station tracking atmospheric conditions, and many others. In LEGO’s prosumption model, the prosumers are not rewarded financially. “Those who post these applications are expected to be satisfied with the joys of knowing that they have improved Mindstorms” [Ritzer, Jurgenson, 2010:27].

Mindstorms has been a tremendous success with the growing community of prosumers around the brand. They interact through the LEGO website, where they modify its contents and share their creations with others. The company also invites Mindstorms “engineers” to show their projects on-line, rate them and comment. Many fan-created websites also share the idea of fun building robots with Mindstorms. In 2005 LEGO invited Mindstorms fans to participate in the internal innovation process developing the newest generation of the product – Mindstorms NXT [Hatch, Schultz, 2010:599].

LEGO Group’s experience with the Mindstorms community has allowed it to transfer the prosumer-centric approach to their more traditional lines of business. In 2005 LEGO Factory was launched with the Design byME service, which allowed customers to design their own LEGO set, buy the bricks necessary to build it, and share the project with other users on-line. Due to quality standards problems, the service was closed on January 17, 2012, but the LEGO Digital Designer software remains in use and is still successful.
Another spin-off of the Mindstorms community experience is LUGNET, described as: “International LEGO Users Group Network, global community of LEGO enthusiasts. LUGNET unites LEGO fans worldwide through forums, web pages, and services.” LUGNET was created in 1998 by two American adult fans of LOGO bricks, Todd Lehman and Suzanne Rich Gree. Today it is the largest (and still growing) user-generated brand community on-line. It hosts various interest groups (including Mindstorms) and facilitates exchanges of LEGO ideas. It also organizes events off-line, such as yearly held BrickFests in the USA [Hatch, Schultz, 2010:597].

LEGO has come to increasingly appreciate the prosumption dialogue. The Group's CEO, Jørgen Vig Knudstorp, promotes this approach within the company culture and encourages user influence in the innovation process and in marketing the brand [Hatch, Schultz, 2010:597].

**Threadless** community. Threadless was founded by Jake Nickell and Jacob DeHart in Chicago in 2000 as an on-line t-shirt business [Lakhani, Kanji, 2008]. Lakhani aptly summarizes his view of the company by saying that “Threadless completely blurs that line of who is a producer and who is a consumer” [Chafkin, 2008], and it is a fully fledged prosumption model. “The customers end up playing a critical role across all its operations: idea generation, marketing, sales forecasting. All that has been distributed”, Lakhani adds [Chafkin, 2008]. Threadless, to be more specific, crowd sources all these functions to the brand community members. Drawing on the work of Howe – who is credited with coining the term “crowdsourcing” – it can be described as the process by which companies outsource traditional internal functions to a large population (the crowd) through an open call for creative input [Howe, 2006a; Howe, 2006b].

Threadless does its core business on-line in close cooperation with its “crowd” of customers. Company community members can participate by submitting t-shirt designs, commenting and critiquing project submissions, voting for their favorite ones to help them win competitions, exchanging insights, blogging, and creating slogans, but in the end – shop for the artist-designed t-shirts. Its 1,933,159 international community members and 409,122 submissions of t-shirt designs make Threadless.com a vibrant environment. Since its inception the company has paid over 5,250,000 USD to artists – the winners of t-shirt design challenges. There are over 1,500,000 votes for about 7,800 submitted designs placed each month by more than 25,500 people.

In 2011 Threadless chose its Ambassadors – four community members outstanding in their dedication to the brand who work closely with the company team to organize on-line challenges and real-life events. Threadless is officially running the Ambassador Program, and their number may keep growing.

Since 2007 Threadless has hosted an annual Family Reunion for the community members to be able to meet in person. “Family” meets only in Chicago, Illinois, but Threadless Meetups Everywhere gives fans the opportunity to meet in other places (372 cities worldwide).
Threadless cares about recognition of its most talented and active “crowd” members. Artists whose submissions were voted by the community to become Threadless t-shirts are honored and supported by the Alumni Club. They are awarded a medal of honor and a variety of rewards (ranging from a notebook to a mug), and are granted access to the Alumni Club restricted forum area. Threadless also rewards the most creative artists and the most engaged community members financially. Bestee Awards are granted in several categories and vary according to the size of remuneration, e.g., 20,000 USD for People’s Choice, Design of the Year, 2,500 USD for Bestee of the Month, 1,000 USD for Slogan of the Year, Scorer of the Year, and Collaboration of the Year.

Threadless community’s on-line activities go beyond the company website. Fans create their own webpages and forums where the exchange of designs and ideas is continued.

According to Brabham “the success of Threadless’ process can be explained by both the diversity of a wise crowd and the suitability of ideation problems in open innovation formats” [Brabham, 2010:1126]. As Brabham explains, the Threadless concept of reaching out to the crowd is ideational in character – its purpose is to generate new design projects – and the “wisdom of crowds” concept developed in Surowiecki’s work suggests that “under the right circumstances, groups are remarkably intelligent, and are often smarter than the smartest people in them” [Surowiecki, 2004:xiii]. Threadless has found a way to capitalize on that.

Re-defining prosumption

As previously demonstrated, although prosumption activities date back to the pre-industrial age and the name was created more than 40 years ago, its use is still not widespread. This could be due to a lack of common definition and understanding of what prosumption actually is. Let us attempt to fine-tune the prosumption phenomenon definition in order to fill this gap. I suggest that prosumption can be formally defined as follows:

**Prosumption is a continuous and transformable process of co-creation of both the unique value to the prosumer and the exchange value engaging at least three co-creators of value: the producer, the consumer, and the consumer community that results in the launch of products that become prosumers’ consumption experiences.**

This definition is grounded in the critically reviewed existing theories and observed business practices. “Prosumption is a process” indeed and not a single event like a traditional act of purchase as Xie et al. [2008:110] suggested. The prosumption phenomenon does not appear and vanish, but it ceaselessly persists. Moreover, the process is “continuous and transformable”. Continuity and transformability constitute two crucial conditions for a successful prosumption arena. LEGO Mindstorms is a good example to justify
this claim: the bricks are the same as they have ever been, but their features, capabilities, and functions can be transformed continuously. These conditions are necessary in contributing to providing a compelling environment for the prosumption process to happen [Prahalad, Ramaswamy, 2003:15].

Zwick et al. (2008) refer to prosumption as “co-creation”. In turn, the value creation concept is rooted in marketing principles. Kotler et al. define marketing as “[a] social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others” [Kotler et al., 2008:7]. Prahalad and Ramaswamy (2000) argue that value is created through collaboration with active customers and partnering companies. The present value creation proposition has evolved into being interactive and networked. Producers do not deliver value by themselves; they can only make value propositions and employ their resources to interactively create value in collaboration with consumers provided their value proposition was accepted [Vargo, Lusch, 2008]. “The customer is always a co-creator of value” [Vargo, Lusch, 2008:3], always a co-producer [Vargo, Lusch, 2004:7] thus value is always co-produced which makes co-production a tool for co-creation. They should not be confused.

The term “unique value to the prosumer” denotes personalization of the prosumption process. Prahalad and Ramaswamy point the direction toward best future practice, arguing that “individual customers [should be allowed] to actively co-construct their own consumption experiences through personalized interaction, thereby co-creating unique value for themselves” [Prahalad, Ramaswamy, 2003:12]. Experiential value is unique by nature. Value created in a dynamic market environment “always involves a unique combination of resources and an idiosyncratic determination of value” [Vargo, Lusch, 2008:8]. This contextual, idiosyncratic and experiential value is always unique and subjective [Vargo, Lusch, 2008:7–9].

Prosumption occurrences can be identified by the creation of “exchange value”, i.e. when a prosumer creates use value for others [Humphreys, Grayson, 2008]. In most instances before the customer is able to extract the use value from the product, some “production” needs to be done, just as buying a box of washing powder does not create the use value before it is poured into the washing machine and programmed to do laundry, or acquiring a camera does not mean that pictures from family vacation were taken. It is not prosumption. These examples fit into Vargo and Lusch’s logic which maintains that customers buy goods because they in fact need a service, but “for these services to be delivered, the consumer still must learn to use, maintain, repair, and adapt the appliance to his or her unique needs, usage situation, and behaviors. In summary, in using a product, the customer is continuing the marketing, consumption, and value-creation and delivery process” [Vargo, Lusch, 2004:11].

This provides useful insight to explanation of use value creation (customers need laundry service or want to have their photos taken), but still does not capture the specificity of prosuming. By the same token, do-it-yourself initiatives are not prosumption
activities, nor is assembling furniture. In the extreme, if the concept of “exchange value” was not included in the definition, every product or service purchase could be interpreted as prosumption.

“At least three co-creators of value: the producer, the consumer, and the consumer community” are needed for the prosumption phenomenon to occur. The business case studies presented earlier in this paper identified those three agents: the producer (representing the company and its network), the consumer (representing the prosumer), and the consumer community (the community of prosumers). Prahalad and Ramaswamy refer to them as “an enhanced base of competence” arguing that the competence base can (and should) be leveraged to “enhance the environment, enabling an ever wider range of potentially desirable experiences for individual consumers” [Prahalad, Ramaswamy, 2003:16]. The Second Life, Mindstorms, and Threadless cases provide valuable insights into co-creators of value involved: notably, leveraging the base compels the consumer community to expand the environment and engage in co-creation of value, taking on new forms and “a life of their own” [Prahalad, Ramaswamy, 2003:15]. Typically the prosumption process does not occur involving just a single consumer, but calls for an extended number of participants, hence the collectivity. While not homogeneous, the “consumer community” members share similar interests and have analogous goals, and with the help of modern technologies they are able to enjoy the same locations of their activities. For now “consumer communities” have conveniently settled on the Internet and it is hard to find a more appropriate place for them to form, but with future technologies they may re-locate elsewhere. It can be argued that “[i]t is on Web 2.0 that there has been a dramatic explosion in prosumption” for just this reason [Ritzer, Jurgenson, 2010:19]. Given the changing and communal nature of the prosumption process, involvement of more than three co-creators of value would not come as a big surprise.

Prahalad and Ramaswamy (2002) maintain that contemporary strategies should be consumer-centric and focus on managing experiences. Valuable consumption experiences can be co-created with customers when they constitute “an integral part of the system for value creation” and are free to influence the process, cross boundaries or challenge the producers for extraction of value. Prahalad and Ramaswamy (2003) have identified the changes in the determination and meaning of value. They suggest that ongoing transformation shifts the basis of value from products and services to experience co-creation, e.g. “Mindstorms employs the capabilities of miniaturization and embedded intelligence to foster transformability, which enables consumers to create experience variety without depending upon LEGO to provide product variety” [Prahalad, Ramaswamy, 2003:17]. By this premise the result of the prosumption process is described as “the launch of products that become prosumers’ consumption experiences” without underscoring the eventual consumption of products as diminishing in its relative importance.

The definition of prosumption presented above provides general guidance on how to identify the process and distinguish it from consumption, use value-creation, market-
ers’ gimmicks, and other phenomena. Acknowledging the complexity and novelty of prosumption, further empirical research is required to model prosumption. Applications of new service-dominant logic [Vargo, Lusch, 2008] and business models rested on co-creating personalized customer experiences [Prahalad, Ramaswamy, 2000] may yield sound prosumption strategies.

**Conclusion**

The prosumption phenomenon has emerged and is growing in importance in the contemporary world. Given its novel properties, engaging in prosumption activities resembles working in the laboratory with sensitive explosives: it is like an experiment, but with the communication abilities of the Internet any mistakes explode instantly. It would be interesting for future research to investigate successful strategies for building vibrant prosumption models. Longitudinal studies would be of particular importance, as evidence has shown that sustaining working prosumption model is notably difficult.

Around the mid 2000s, Second Life was a tech-media sensation. In 2007–2008, the situation started to change. The number of users simultaneously present in the virtual world has been dropping from a peak of 88,200 in the first quarter of 2009 (in December 2011 the median monthly Second Life on-line user concurrency fell below 50,000 players\(^2\)), marketers started to lose interest and refrained from brand promoting activities in Second Life or even withdrew their businesses from the virtual reality. The drop in financial performance forced Linden Lab to close its Mountain View office in California and off-shore offices in Amsterdam, Brighton, and Singapore and lay off 30% of its employees in 2010 [Marshall, 2011]. At present Linden Lab is working on strategies that will help to win the company its own “second life” on the market [Oshry, 2012].

Beginning in May 2006, web users have almost spontaneously organized themselves around new movie production. “Snakes on a plane” have become what one of the critics called “[p]erhaps the most internet-hyped film of all time” [Brown, 2006]. Started after screenwriter Josh Friedman’s blog entry and a few other Internet postings, fans got engaged to promote the movie. An incredible amount of user-generated content was produced to advertise “Snakes on a plane”, sometimes through parody – YouTube films, wall posters, songs, fan websites. Feedback from movie fans was incorporated into official promotional strategy. Moreover, additional shooting days were added to modify the plot, in-film dialogues, and amplify expression of several scenes. When the movie was finally released on August 18, 2006 it turned out to be a disappointment for the audience, critics, distributors, movie theaters owners and even the film creators. As The New York Times reviewer concluded, “‘Snakes on a Plane,’ the wildly hyped high-concept movie, turned out to be a Web-only phenomenon” [Waxman, 2006].
The market power of prosumers should not be underestimated. The prosumption manifested on the Internet is relatively new to the academic literature, but it has already attracted scholarly research as an increasingly important phenomenon to address nowadays. With the advent of Web 2.0, the classic view of customers needs to be reexamined and updated. The companies used to collaborate with clients to customize goods, but now the customers demand genuine roles in future product design. The enterprises are going from the company-centric view of goods co-creation to the prosumer-centric process [Tapscott, Williams, 2008:124–150]. Answering the question of how to engage successfully in prosumption activities with customers is a new marketing research problem and there are examples demonstrating that this is not an easy task. The separating line between the extremes – the customer freely changing the company’s product and the enterprise’s strict control over the process – proves to be thin. The company letting its customers do whatever they wish with the product may lose control over it – or even its entire business. On the other hand, the company not inviting its consumers to co-create may lose valuable innovations and the competitive edge – or its reputation.

Whether prosumption becomes an opportunity or a threat depends on the business decisions that companies make. Studies of both successful strategies and market failures may bring valuable insights into which frameworks deliver the best results.

Notes

1 In this setting, the “prosumer” refers to the middle-level economical recording studio equipment, as well as to the acquirers and users of such technology. The term is in widespread use to describe the studio gear, but has a pejorative meaning when associated with people (Cole, 2011).

2 Tim O’Reilly is recognized as the originator of the term “Web 2.0”. According to O’Reilly, “Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation,” and going beyond the page metaphor of Web 1.0 to deliver rich user experiences” [O’Reilly, 2005]. By referring to the cumulative changes in Web applications and utilization such a definition of Web 2.0 touches upon the research problems presented and thus is adopted for the purpose of this paper.

3 Dealbook, February 1, 2012.

4 The report is based on a longitudinal study.

5 Second Life is available at http://secondlife.com/

6 Linden Lab is available at http://lindennlab.com/

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**Netography**

Abstract

Toffler is credited with the first use of the term “prosumption”. Since 1980 the name has been widely employed in academic papers. The term “prosumer” is made from “consumer” and “producer” to reflect the vanishing traditional separation between the two categories and their functions. Studies of the relevant literature have shown that there is no common agreement on how the phenomenon should be defined. This paper attempts to develop a clarified theory-grounded definition of prosumption. Analysis of mainstream and progressive academic literature aims to capture the variety of prosumption phenomenon definitions and its prevailing properties. Moreover, with the emergence of Web 2.0, the phenomenon of prosumption is gaining importance. Academic research of business practices shows that Internet properties empower consumers to become prosumers and that prosumption has found its most favorable place there. Synthesis of the literature studies, supported by examples of business practice, serves as a means to offer a new, comprehensive definition of prosumption.

Key words: Prosumption, co-creation of value, Web 2.0, consumer community
Introduction

The aim of this paper is to explore how labor market institutions (LMIs) interact. It looks at the theoretical implications for the functioning of the labor market. Despite the vast literature on LMIs, their microeconomic foundations and their effects on labor market performance and outcomes, there is no clear answer on which institutions interact, when and why. Studies exist that emphasize the importance of such interactions from a theoretical point of view in relation to the possibilities of reforms. This paper aims to find basic evidence for the interactions between LMIs. It argues that they can be seen as enablers as well as obstacles for good labor market policies. This is done by leaving the narrow field of labor economics and finding theoretical arguments for a more comprehensive view, while taking into account different levels of analysis.

Labor market institutions are defined by Boeri and Van Ours [2008:3] as “a system of laws, norms, or conventions resulting from a collective choice and providing constraints or incentives that alter individual choices over labor and pay”. They also argue that LMIs “interfere with the exchange of labor services for pay. They do so by introducing a wedge between the reservation wage of the workers and the value of a job, that is, between labor supply and demand schedules” [Boeri and Van Ours, 2008:14]. The most common examples of LMIs include: minimum wage, wage-setting mechanisms (collective bargaining), payroll taxes, unemployment benefits (UB), employment protection legislation (EPL) and active labor market policies (ALMP). Often mechanisms that regulate entrance to and attainment on the labor market (education and skill formation) are included as well as exit mechanisms from the labor market (retirement programs).

Given that LMIs create a wedge, many economists and politicians are skeptical about the presence of strong LMIs because they see them as causes of labor market inefficiency and unemployment. Others, again both politicians and economists, have a more benevolent attitude towards certain LMIs, as they are likely to mitigate risks for workers by offering them greater job and income security [cf. Agell, 1999, 2002]. Most studies, however, argue that the functioning of different LMIs is complex and that their effects are at most ambiguous [cf. Nickell, 1997; Blanchard and Wolfers, 2000; Baccaro and Rei, 2007].
This paper explores the idea that LMIs interact and thereby can contribute to equitable and efficient labor market outcomes: First of all, theoretically by analyzing what the essence of LMIs is: where do they come from, how do they work and in what kind of environment do they function. Second, we analyze empirically by performing some basic correlation tests to identify which LMIs interact. We limit our analysis to the 27 current EU member states. These countries constitute a group of different countries with different welfare and labor market systems, but still subject to similar policy challenges and pressures.

Many previous studies on LMIs only focus on the Old Member States of the EU, or OECD countries. Another stream of literature focuses on (former) transition countries as a distinct and specific species [cf. Ederveen and Thissen, 2007; Failova and Schneider, 2008; Lehman and Muravyev, 2011]. Koster et al. [2011:5] claim that there is “strong evidence that welfare state institutions and employment relations in Western European countries different fundamentally from those institutions in Central and Eastern European countries”. This study assumes that the basic mechanisms behind LMI interactions in New Member States are no different than in Old Member States, while still accounting for varieties that may exist.

The remainder of this article is organized as follows. Section II describes theoretical issues. Section III describes the method and data. In section IV the outcomes are analyzed and results discussed. Section IV concludes.

A theory of labor market institution interactions

Functions of labor market institutions. Even the most liberal labor market needs institutions to set the rules of conduct. Therefore, a labor market without institutions is impossible to realistically imagine. Although many studies treat LMIs as exogenously given, it is also worth treating them as endogeneities by looking at their origins and rationale [Arpaia and Mourre, 2009:4]. Boeri and Van Ours [2008:18–19] list three arguments for the existence of LMIs, namely that they increase efficiency, promote equity and are the result of policy failures. Each of them is discussed briefly, as they represent in broad lines the different views on LMIs in the literature and they lead up to the discussion of interactions. Note that the different views are not mutually exclusive and may even be complementary.

An LMI can be the result of policy failures that arise when certain minority groups are powerful enough to impose policies that serve mainly them, but whereas the costs are borne by the majority. In this view, LMIs are not created to benefit society as a whole, but the result of social conflict between groups that seek to maximize their rent [Arpaia and Mourre, 2009:5; see also: Saint-Paul, 2000]. The winners in such conflicts are usually the powerful ‘insiders’, who are able to create job and income security for themselves.
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(often through the presence of strong trade unions), whereas the losers, the ‘outsiders’, are those who are on the fringes of the labor market and have no access to permanent labor contracts or unemployment benefits (for an extensive discussion, see [Lindbeck and Snower, 2001]). High minimum wages and rigid legislation may cause obstacles for employing these often low-skilled or inexperienced workers on permanent contracts. Reform of such dual labor markets is often difficult due to the institutionalized power of the dominant group.

According to the second view, LMIs can contribute to the efficiency of the labor market when the first-best competitive labor market outcome is unattainable due to certain market failures. LMIs can provide a second-best solution. Especially when capital and insurance markets are incomplete, risk-averse workers are not able to sufficiently insure themselves against loss of a job or income. Nor will they sufficiently invest in their own education and training. Another example is that when employers are not wage-takers but wage-setters (having monopsony power), the introduction of a minimum wage can actually increase employment [cf. Dolado et al., 1996; Boeri and Van Ours, 2008, chapter 2]. Strong trade unions can have a positive effect on efficiency by inducing wage compression, especially if bargaining takes place at the national level [cf. Arpaia and Mourre, 2009; Boeri and Van Ours, 2008].

In the third view, LMIs serve equity purposes by contributing to redistribution of the surplus of labor between employers and employees [Boeri and Van Ours, 2008]. They can act as a form of social insurance [Agell 1999, 2002] or social policy [Bonoli, 2003]. The minimum wage is aimed at securing sufficient income when working. Benefits have an insurance function against unemployment. EPL protects workers from losing their jobs. ALMPs aim at helping the unemployed to find appropriate work. The argument against LMIs as instruments for distribution is that they decrease total welfare. Some of the redistributive aims could be reached by direct transfers and taxes. The latter, however, more heavily depend on access to information and are discrete measures that are more easily subject to the whims of policy-makers [Boeri and Van Ours, 2008:19].

The role of interactions. So far we have treated LMIs as individual institutions imposed on a perfect or unregulated labor market. There are two problems with looking at LMIs in this way, if we want to sketch a realistic view of any labor market. Institutions rarely come alone and they are rarely imposed on an unregulated labor market. Table 1 summarizes the arguments for the existence of LMIs; in addition to the point of view of the individual institution, the argument for the existence of institutions as a reaction or complement to an existing LMI (or configuration of LMIs) is added.

With regard to LMIs as a result of policy failure, at least two different types of interactions can be distinguished. First of all, there are complementarities between rent-creating and rent-protecting institutions [Saint-Paul, 1997, 2000]. These can explain, for example, why in many countries where trade unions have a strong role in the wage-setting
TABLE 1. Arguments for the existence of labor market institutions

<table>
<thead>
<tr>
<th>Argument</th>
<th>Individual LMI</th>
<th>Interacting LMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy failure</td>
<td>Certain minority groups are powerful enough to impose policies that serve them,</td>
<td>1. Complementarities between rent-creating and rent-protecting institutions.</td>
</tr>
<tr>
<td></td>
<td>whereas costs are borne by the whole of society.</td>
<td>2. LMI 1 created for the insiders, LMI 2 created to address the outsiders.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>First-best competitive labor market outcome is unattainable and institutions help</td>
<td>LMI 1 creates inefficient outcomes. LMI 2 is needed to obtain third-best outcomes.</td>
</tr>
<tr>
<td></td>
<td>attain second-best solutions.</td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>Contribution to redistributive purposes.</td>
<td>LMI 1 creates inequitable outcomes or chances on the labor market. LMI 2 is needed to correct these.</td>
</tr>
</tbody>
</table>

process, stricter employment legislation is in place. A second option is that policymakers realize that the existence of one LMI favoring the ‘insiders’ has such strong inefficiency effects (e.g. by creating high unemployment) that it is a threat to upholding the status quo. Another LMI is then aimed at improving the position of the outsiders. Usually, reforms are implemented that do not hurt the core interest and powerful position of the dominant group. An example here is the creation of ALMPs as a carrot-and-stick method of directing the unemployed to jobs. Another example is the creation of possibilities for more fixed-term contracts as a second tier to stricter EPL, a measure from which “insiders” stay exempt and affects mainly “outsiders” [cf. Blanchard and Landier, 2002].

LMIs have the potential of creating outcomes that are inefficient, inequitable or both for society at large or certain groups. If one LMI or a configuration of LMIs creates inefficiencies, other LMIs can be put in place to correct for such effects. As an example, unemployment benefits are believed to create more unemployment. However, Nordic countries have relatively high replacement rates of unemployment benefits and maintain low unemployment rates, a phenomenon that is often ascribed to the effective combination with other labor market policies. For the equity purposes of LMIs, similar examples can be found. If rigid EPL causes unemployment spells to last relatively long (because of disincentives for employers to hire), then longer duration of unemployment benefits can compensate for the loss of income. In Denmark where EPL is rather flexible, those who lose their jobs are offered rather generous unemployment benefits and assistance in finding a new job through ALMPs.

Interactions as part of labor market models. Institutions and interactions matter to labor market performance and the possibilities for reform. If we know which combinations work, then why do countries have such differently institutionalized labor markets? Why does Italy combine relatively generous unemployment benefits for insiders with rigid employment protection, whereas in Denmark they are combined with relatively
flexible legislation? Part of the answer to these questions may lie in the following quote of labor economist Richard B. Freeman [1998, p.6]: “To the extent that configurations of institutions or policies matter, the proper comparison across countries is between entire models, not between particular features”. LMI interactions operate within a larger context, which Freeman refers to as a model.

Similar concepts appear in political economy, political science and sociological literature under different names. There is the ‘varieties of capitalism’ literature [cf. Hall and Soskice, 2001], the “worlds of welfare” literature [cf. Esping-Andersen] and the research on mobility regimes [DiPrete et al., 1997], which have in common that they explain why institutions do not always come into being or persist because they are efficient or equitable, but because they are part of a larger whole within which they operate and that codetermines them. It would be wrong to assume that all institutions exist for a clearly defined reason. Sometimes they just exist because the historical processes shaped them to what they are, along with the costs and uncertainties that are connected with reforming them [cf. Streeck and Thelen, 2005].

Types of interactions. There are two terms that are often used in the literature and refer to similar phenomena. It is useful to distinguish the term “interactions” [a term used by, among others: Eichhorst and Konle-Seidl, 2005; Boeri and Van Ours, 2008; Arpaia and Mourre, 2009; Koster et al., 2011] from another term that often appears in the LMI literature, namely “complementarities”. In our definition, the term “interaction” refers to the observation that one institution interacts with another institution. One institution is reacting to or affected by the functioning of another. “Complementarities” are a subcategory of interactions, but they imply that there is a certain direction to the outcomes of the interaction, namely that two (or more) institutions together create more efficient of equitable outcomes than each institution would separately. Or, as Coe and Snower [1997] put it: “A group of policies is complementary when the unemployment effect of each policy is greater when it is implemented in conjunction with the other policies than in isolation” (see also [Hall and Soskice, 2001:17]).

Literature on institutional interactions on the labor market has made great theoretical and empirical advances during the last decades. In spite of this and due to their complexities, complementarities are difficult to capture in a model or extract from empirical evidence [cf. Bassanini and Duval, 2009]. Elmeskov et al. [1998:223–224] show that interactions between several LMIs have significant effects on structural unemployment rates, while Daveri and Tabellini [2000] show how the interaction between tax rates and centralisation levels of collective bargaining matter for unemployment. Saint-Paul [1994, 1997, 2000] points at the complementarities between rent-creating and rent-protecting institutions. Studies by Coe and Snower [1997], Orszag and Snower [1999], Bélot and Van Ours [2000] and Bassanini and Duval [2009] emphasise the importance of taking into account complementarities with regard to reforms to improve labor market performance in European and OECD countries.
There is another type of interaction when the inefficiency (or absence) of one institution leads to the increased (and often inefficient) use of another institution. Hall and Soskice [2001:17] mention this possibility as ‘institutional substitution’. Whereas it is not the aim of this paper to focus on substitutions, it is important to realize their implications as being the opposite of complementarities. Blanchard and Landier [2002], for example, analyze how partial labor market reforms in France in the early 1980s make fixed-term employment contracts a substitute for permanent contracts, but in effect making labor market outcomes more inefficient and inequitable. Another example is the implementation of early retirement policies in many continental European countries in the 1980s, making it a substitute to activation policies aimed at older employees [cf. Hemerijck and Eichhorst, 2010].

The literature does not yet offer a systematic mapping of the interactions among all LMIs. Boeri and Van Ours [2008:278] make a selective attempt by presenting a series of scatter plots of pairs of what they consider the most common and important LMI complementarities. As they note, taking into consideration that they discuss 11 LMIs in their book, plotting them all would mean presenting 110 plots for all possible combinations! The approach of this paper is to generalize and offer an overview of as many interactions as possible and find the rationale behind them.

**Method and data**

In order to detect regularities among LMIs in the 27 EU member states, we test for correlations among them. This method should lead to discovery of which LMI tends to interact with which. There are two main limitations to this method. First, correlation does not say anything *per se* about causation. There is always the possibility of another latent variable causing the correlation. Therefore, careful analysis with the help of theory is needed. Second, the absence of correlation does not mean that interaction is fully absent. There can be cases of complementarities only taking place within certain models (or even countries). Due to the small sample of countries, such differences in variance cannot be accounted for through quantitative analysis, but could be the subject of a more descriptive case-by-case study.

Details on the data are included in the Annex. The data broadly covers the period 2000–2005 for the current 27 EU countries (as much as data is available). The correlations have been calculated as averages for this six-year period. This timeframe has been chosen because it offered the greatest availability of data and six-year averages should be able to account for fluctuations in the business cycle [cf. Nickell, 1997:64]. Data has been collected from different sources because one single and comprehensive source on all LMI data is not yet available. A total of nine LMIs are analyzed with the help of 14 variables. What now follows is a short description of each of the LMIs with their associated indicators and why they matter.
LMIs come in various shapes and sizes and differ in the way they create constraints and incentives that alter individual choices over labor and pay. Therefore, while introducing the LMIs that are included in our model, it may be useful to briefly remind ourselves of the theoretical mechanisms that drive them and the impact each of them has on labor market performance. Again, there are vast amounts of literature on the microeconomic and macroeconomic functioning and impact of each of the institutions, for which there is no room in this paper. Some references to the literature are offered, but not exhaustively. An attempt is made to group the variables according to their main theoretical function, although some LMIs might have more than one effect on labor market performance. The numbers between brackets refer to the variables that are included in the analysis.

A first type of LMI relates to the way wages are determined and to what extent they are the result of collective determination and the influence of trade unions. Our collective bargaining (1) variables relate to the strength and functioning of trade unions. First of all, collective bargaining can be measured by the proportion of workers’ contracts covered by collective agreements that were bargained over by unions (1a). Second, it matters on which level coordination takes place: national, industry or company level (1b).

Second, some LMIs are direct rigidities. There can be legislation in place that protects employees from employers arbitrarily or unfairly dismissing them. Creating costs for employers to fire people, however, will also make them more reluctant to hire new people in times of uncertainty. This means that during a temporary labor market shock, employment rates may remain stable due to the costs of labor turnover. During a labor market recovery, on the other hand, unemployment can stay high longer because of the uncertainty that employers see themselves faced with [Lindbeck and Snower, 2001]. Employment protection legislation (EPL) (2) is measured with the help of a synthetic indicator established by the OECD. It includes measures for the rigidity of firing regulations for individual workers under permanent contract, the rigidity for workers under temporary contracts and the rigidity of collective dismissals [OECD, 2004].

Closely associated with EPL is a set of labor market policies that further influence the flow from unemployment or inactivity to employment. Unemployment Benefits (3) form an insurance or income guarantee for those who are left without work. However, benefits increase the reservation wage for which one is willing to work and hence have the potential of making unemployment spells longer [cf. Nickell, 1997:67]. Unemployment benefits have different dimensions to them. A common measure is the general replacement rate (GRR), which indicates the ratio of the employment benefits to previous earnings, making it a measure of generosity (3a). Coverage indicates what proportion of the labor force is eligible for benefits (3b). There is no variable for duration of benefits in our data.

To offset possible negative effects of generous unemployment benefits, active labor market policies (ALMP) (4) can be implemented. ALMP usually aim at activating the unemployed through carrot-and-stick methods and guide them towards new jobs, through career guidance, training or subsidized work. ALMP constitute an important
part of the flexicurity model, where they are expected to support workers in the face of flexible protection legislation and increase efficiency in the face of generous unemployment benefits. Flexicurity is a model that seeks to make use of LMI complementarities and therefore constitutes an interesting case for us. An often-applied measure for ALMP, as in our study, is the proportion of GDP that is spent on them.

The next two LMIs influence the levels of disposable income, i.e., they define the “price” at which labor is supplied. Minimum wages (5) set a floor below which it is not possible to pay workers. Minimum wages are often set by the central government, collective bargaining organs or some form of collaboration between both. Not every country has a centrally or legally established minimum wage (e.g. Finland). Some countries have a minimum wage that is established at the sector level (e.g. Germany). Critics of a minimum wage claim that it causes unemployment by making labor too expensive, especially among the low-skilled and young people. Empirical evidence, however, is mixed [cf.: Dolado et al., 1996]. A common measure for minimum wage is the ratio of the minimum to the average or median wage. In our study we employ the first measure, also known as the Kaitz-index.

Payroll taxes (6) drive a wedge between the cost of labor to the firm and the net wage that the worker receives. It usually consists of income taxes and social security contributions. Payroll taxes are closely related to the financing of unemployment benefits through social security contributions. A tax wedge that is too high can have a similar effect as a minimum wage and is found to affect in particular the low-skilled in terms of causing unemployment [Góra et al., 2006]. In our study, payroll taxes are measured as the relative tax burden for an employed person with low earnings.

Working time regulations (7) set limits to the quantity of labor supplied. In the 1980s and 1990s many governments believed that reducing working hours could actually create more jobs. Decreasing supply can also mean pressure on wages and thereby cause higher unemployment [cf. Nickell, 1997, p. 60; Boeri and Van Ours, 2008, p. 116]. In our study we include as indicators bargained normal working hours (7a) and actual working hours (7b), both as hours per week for full-time employment.

Education (8) is important as an LMI for different reasons. First of all, it indicates investment in human capital, in knowledge and skills. It largely determines the employment prospects and wage levels of individuals. Better and more education also create positive externalities that benefit the whole of society and the economy. Second, the length of education codetermines the timing of entrance to the labor market. In this study we apply two measures of education. The first is the proportion of GDP spent on education (8a). A second measure is to look at how many years pupils are expected to gain education (8b). The latter indicator can also serve as a measure of the timing of entrance to the labor market. The longer one stays in education, the later the entry to the labor market.

Exit (9) from the labor market is defined in this study as taking place through retirement programs. The usual way is to retire at the mandatory retirement age and receive
a public pension for which workers have paid contributions throughout their working lives. Often certain heavy occupations have lower pension ages than those that require less physical work. Early retirement programs have been used as a policy instrument to lift pressure from an oversupply of labor. In our analysis we include a measure for the effective retirement age (9a). To account for the possibility of early retirement schemes, we include the employment rate among the age group 55–64 (9b), although keeping in mind that employment among this group can be low for many other reasons.

**Results and discussion**

The results of the pair-wise correlation analysis on these LMI indicators are included in table 2. There are a total of 84 possible combinations, out of which 32 are found to be significant: 10 at the .05 level and 22 at the .01 level. One interpretation of this overall result is that indeed there are plenty of interactions, but certainly not all LMIs correlate. If all variables had been correlating, it would have pointed in the direction of one latent variable. These results leave room for further analysis on why certain interactions occur and which can be considered complementarities or substitutes.

Table 3 includes the number of interactions for each of the individual variables. The numbers range from 0 (minimum wage) to 9 (UB coverage and ALMP), with a mean of 5.07. It is worth looking separately at the patterns of interaction for each LMI and variable. It would be attractive to draw easy conclusions from these data, but correlation does not tell us much about causation or its direction. Some of the effects that LMIs might have on each other would have to be speculation, or should be the subject of other more detailed studies.

The strength of collective bargaining, as expected, correlates with many of the other LMIs. After all, in countries where trade unions have a strong position, they often have much to say on labor market policies that affect their constituencies. The stronger the collective bargaining mechanisms, in terms of the worker contracts covered, the higher the level of employment protection legislation and the higher the level and coverage of unemployment benefits. This corresponds to the idea of powerful groups in society creating institutions that are both rent-creating as well as rent-protecting [Saint-Paul, 1997, 2002]. Whereas ALMP may not be directly in the interest of trade unions, spending on it is positively correlated with the coverage of the collective bargaining mechanism. Especially when bargaining takes place at a predominantly national level, it could induce trade unions to accept ALMP as a package deal when strict EPL and generous unemployment benefits are in place [cf. Eichhorst and Konle-Seidl, 2005]. Stronger collective bargaining also comes with fewer working hours, both agreed as well as actual. The predominant level of collective bargaining makes a difference in the generosity and coverage of unemployment benefits and, as we have seen, the spending on ALMP.
# Table 2. Labor market institution correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>1a. Union coverage</th>
<th>1b. Union coordination level</th>
<th>2. EPL</th>
<th>3a. GRR</th>
<th>3b. UB coverage</th>
<th>4. ALMP</th>
<th>5. Minimum wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Union coverage</td>
<td>1</td>
<td>-0.660***</td>
<td>0.609**</td>
<td>0.893**</td>
<td>0.744**</td>
<td>0.693**</td>
<td>0.028</td>
</tr>
<tr>
<td>1b. Union coordination level</td>
<td>1</td>
<td>-0.202</td>
<td>-0.600**</td>
<td>-0.521*</td>
<td>-0.461*</td>
<td>-0.496*</td>
<td>-0.091</td>
</tr>
<tr>
<td>2. EPL</td>
<td></td>
<td></td>
<td>0.602*</td>
<td>0.153</td>
<td>0.127</td>
<td>0.293</td>
<td></td>
</tr>
<tr>
<td>3a. GRR</td>
<td></td>
<td></td>
<td></td>
<td>0.694**</td>
<td>0.703**</td>
<td></td>
<td>0.248</td>
</tr>
<tr>
<td>3b. UB coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.669**</td>
<td></td>
<td>0.206</td>
</tr>
<tr>
<td>4. ALMP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.193</td>
</tr>
<tr>
<td>5. Minimum wage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Tax wedge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7a. Agreed working hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7b. Actual working hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8a. Education expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8b. School expectation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9a. Effective retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9b. Employment elderly</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (two-sided)

** Correlation is significant at the 0.01 level (two-sided)

Sources: Author’s own calculations based on: Aleksynska and Schindler [2011], EIRO [2005], Eurostat [2011], OECD [2004].
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>,322</td>
<td>-,553(**)</td>
<td>-,448(*)</td>
<td>,360</td>
<td>,348</td>
<td>-,093</td>
<td>-,011</td>
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<tr>
<td>-,113</td>
<td>,204</td>
<td>,268</td>
<td>-,147</td>
<td>-,324</td>
<td>,042</td>
<td>,072</td>
</tr>
<tr>
<td>,262</td>
<td>-,034</td>
<td>,064</td>
<td>-,107</td>
<td>-,269</td>
<td>,004</td>
<td>-,083</td>
</tr>
<tr>
<td>,002</td>
<td>-,599(**)</td>
<td>-,547(**)</td>
<td>,344</td>
<td>,080</td>
<td>,130</td>
<td>,132</td>
</tr>
<tr>
<td>,111</td>
<td>-,647(**)</td>
<td>-,456(*)</td>
<td>,601(**)</td>
<td>,445(*)</td>
<td>,235</td>
<td>,357</td>
</tr>
<tr>
<td>,214</td>
<td>-,591(**)</td>
<td>-,673(**)</td>
<td>,666(**)</td>
<td>,418(*)</td>
<td>,219</td>
<td>,379</td>
</tr>
<tr>
<td>,211</td>
<td>-,110</td>
<td>-,212</td>
<td>,120</td>
<td>-,278</td>
<td>-,132</td>
<td>-,046</td>
</tr>
<tr>
<td>1</td>
<td>-,092</td>
<td>,039</td>
<td>,147</td>
<td>,412(*)</td>
<td>-,225</td>
<td>-,157</td>
</tr>
<tr>
<td>1</td>
<td>,427(*)</td>
<td>-,350</td>
<td>-,292</td>
<td>-,152</td>
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<tr>
<td>1</td>
<td>-,558(**)</td>
<td>-,301</td>
<td>-,120</td>
<td>-,390(*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>,512(**)</td>
<td>,153</td>
<td>,471(*)</td>
<td></td>
<td></td>
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<tr>
<td>1</td>
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<td>,836(**)</td>
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</tbody>
</table>
**TABLE 3. Number of interactions per variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Union coverage</td>
<td>8</td>
</tr>
<tr>
<td>1b. Union coordination level</td>
<td>5</td>
</tr>
<tr>
<td>2. EPL</td>
<td>2</td>
</tr>
<tr>
<td>3a. GRR</td>
<td>8</td>
</tr>
<tr>
<td>3b. UB coverage</td>
<td>9</td>
</tr>
<tr>
<td>4. ALMP</td>
<td>9</td>
</tr>
<tr>
<td>5. Minimum wage</td>
<td>0</td>
</tr>
<tr>
<td>6. Payroll taxes</td>
<td>1</td>
</tr>
<tr>
<td>7a. Agreed working hours</td>
<td>6</td>
</tr>
<tr>
<td>7b. Actual working hours</td>
<td>7</td>
</tr>
<tr>
<td>8a. Education expenditure</td>
<td>6</td>
</tr>
<tr>
<td>8b. School expectancy</td>
<td>5</td>
</tr>
<tr>
<td>9a. Effective retirement</td>
<td>1</td>
</tr>
<tr>
<td>9b. Employment elderly</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

EPL as an indicator of direct labor market rigidity does not have as many interactions as one may expect, considering the importance attributed to it in the literature. In line with much of the literature [cf. OECD, 2004; Boeri and Van Ours, 2008; Saint-Paul, 1997, 2002], EPL is positively related to the coverage of collective bargaining and the generosity of UB. There is no proof of correlation with ALMP, an LMI that is often mentioned in combination with EPL and UB. This is most likely so because of the different models that are possible with EPL. For example, Denmark and Sweden both spend relatively high amounts on ALMP, but Denmark has flexible EPL, where Sweden’s EPL is rather strict. Then again, Greece has strict EPL combined with low spending on ALMP, whereas the UK combines flexible EPL with low spending on ALMP.

Unemployment benefits generate one of the largest numbers of interactions: 8 for the general replacement rates and 9 for coverage. GRR correlates with the collective bargaining indicators, with EPL, ALMP and both working hours indicators. UB coverage follows a similar pattern, but differs slightly on two points. There is no significant correlation of the latter with EPL. Boeri and Van Ours [2008:281–282] classify UB and EPL as imperfect substitutes and show that they are negatively correlated, although this hypothesis is refuted by others, including Elmeskov et al. [1998]. In our data there is no strong proof for either hypothesis.
UB coverage is also positively correlated with the two education variables. A possible explanation is that high-skilled economies (indicated by higher levels of spending on education and longer time spent in school) need to offer their workforce broader insurance if the skills are specific and expensive to invest in. Workers will not invest in expensive and specific skills if they know that they are not insured for unemployment and given the chance to find a job at a similar skill-level. The relationship between the levels of social protection and skill levels has been pointed out by Estevez-Abe, Iversen, and Soskice [2001] as the “welfare-skill formation nexus”. There is evidence for the possibility of LMI complementarities between UB coverage and education.

ALMP correlates with the same variables as UB coverage: collective bargaining, unemployment benefits, working hours and education. Higher spending on ALMP is very likely part of a more coordinated and collective labor market. The absence of interaction with EPL is discussed above. One other absence of interaction worth noting is with the exit variables. Higher spending on ALMP does not significantly increase employment among the elderly and does not cause them to retire at a later age.

Minimum wage is the great outlier in our study, by not interacting with any of the other variables at all. It is unclear if this has to do with the reliability of the data or because of the small sample of countries (15) for which data is available. One could expect that, for example, the strength of union bargaining would have a positive effect on minimum wages – or that a higher minimum wage would make entrance to the labor market more difficult, so that young people would stay longer in education. There is, however, no proof of such interactions.

The second outlier is payroll taxes, with only one significant interaction: school expectancy. Here the effect could work two ways. It can been seen as a confirmation of the hypothesis of Góra et al. [2006] that the tax wedge has a larger distortionary effect on employment in low-skilled countries, while higher-skilled countries can afford higher payroll taxes. The other possible effect is that in countries with higher tax wedges, it is more difficult for newcomers to enter the labor market, so they choose to stay in school longer. For the payroll taxes variable, one might expect more interactions. For example, higher UB replacement rates have to be financed from higher taxes [on interactions between UB and taxes, see: Elmeskov et al., 1998], for which we find no evidence in this study. Stronger trade unions are also often associated with higher taxes, although Daveri and Tabellini [2000] have shown that the level of centralisation of collective bargaining counts, rather than the level of unionisation. In theory taxation can also have effects on employment decisions for the elderly, but this also cannot be proven on the basis of these data.

Working hours (both agreed and actual) generally seem to be part of the same coordinated labor market package, together with collective bargaining, unemployment benefits and ALMP. The more coordinated the labor market, the fewer hours are worked on average per week. Actual working hours have two additional interactions,
as compared with agreed working hours. The first is that the lower the working hours, the higher the spending on education. It is possible that because individual workers get better education and therefore are more highly skilled, they earn more and therefore decide to work less. In other words, for higher-skilled societies, the income effect takes over from the substitution effect. The second correlation is that the lower the working hours, the higher the employment rate among the elderly. It is plausible that working fewer hours makes it more attractive for older workers to stay longer on the labor market.

Education (both in terms of expenditure and school expectancy) does not significantly correlate with the coordinated labor market indicators related to unions, EPL and GRR, but there is significant correlation with UB coverage and ALMP. The relationship with UB coverage is discussed above and the positive correlation with ALMP could be explained by an overall investment in education, i.e. the skill level in the economy and the importance that society attaches to the aims of lifelong learning. Not surprising, perhaps, countries that have higher expenditures on education also have longer school expectancy. Lastly, there is a significant relationship between education and the employment rate among the elderly. It is possible that the longer one stays in school, the longer one lasts on the labor market. A second possibility (not excluding the first) is that those societies with higher skill levels, with for example larger services sectors and less heavy manufacturing jobs, create better opportunities to work longer.

Our exit indicators show little overall correlation with the other variables. The effective retirement ages only correlates with the employment rate among the elderly, as may be expected. As described above, there are correlations of the elderly employment age with actual working hours and the education variables. For the other variables, no overall interaction patterns can be discerned.

When considering those institutions that interact, two main patterns seem to dominate. Roughly speaking, labor market models tend to develop along two axes. The first axis is the level of coordination or collectivism in the labor market. We see a group of variables interacting that include collective bargaining, unemployment benefits, employment protection legislation and active labor market policies. Working time levels are also influenced. These interactions are likely the result of the historical influence of the state and social partners in setting the conditions for labor market policies.

The second axis is related to the skill level in society. Here we detect interactions between education (both spending and school expectancy), ALMP, retirement and to some extent UB coverage and payroll taxes. Highly skilled societies invest more in education, have students who stay in school longer, spend more on ALMP to smoothen transitions between skill-intensive jobs, retire at a later age, are able to raise higher payroll taxes and need broad-coverage unemployment insurance for individuals’ investment in human capital². More research would be needed, however, to prove that these propositions hold.
Conclusions

This paper offers very few definite conclusions and many questions for future research. The aim of the study is to offer some theoretical elaboration on the concepts of labor market institutions’ interactions and some empirical evidence on their existence across labor markets. It aims to show that interactions are a result of the incompleteness of individual LMIs and an essential mechanism of constituting different labor market models. The empirical part explores what patterns of interactions can be detected across EU member states. It shows that, although the sample includes economies of different sizes, at different stages of development and with different social models in place, certain institutions tend to interact across our sample (whereas others do not). Two patterns of interactions can be detected in our study. The first runs along the lines of the level of coordination or collectivism in the labor market. The second is related to the skill-level in society.

When it comes to the lack of interactions of certain variables, this does not mean that these LMIs (mainly minimum wage, tax wedge and effective retirement age) can be simply disregarded. These LMIs might be labor market model-specific, meaning that their interaction with other LMIs depends on a third LMI or on the overall labor market model in place. This also goes for other missing interactions, such as the widely discussed high EPL – low UB – high ALMP spending complementarities under the flexibility model. It is beyond the scope of this article to go into all these possibilities, but here there is also certainly more room for further research into model-specific complementarities or substitutes.

There are a few shortcomings to this study. Data availability for some countries and some indicators has proven to be rather limited. In addition, the short period of time that has been studied might raise questions and demands for a more longitudinal study. This was not possible, however, due to the lack of availability of overlapping data series for so many indicators. As already mentioned, taking the EU 27 countries as a sample carries in itself certain problems. Many might prefer choosing OECD countries as a sample or at least countries with similar levels of development. The aim of the study is, however, to provide evidence for the proposition that certain LMI interaction patterns take place across countries, regardless of this development gap. Moreover, with many policy recommendations coming from an EU level and affecting all EU member states (also with regard to labor market policies and reforms) it is important to consider if institutions in all member states would benefit equally from such policies and recommendations.
Notes

1 For example, Saint-Paul [1994, 1997], Nickell [1997] and Siebert [1997] do not refer to labor market institutions but to rigidities, which has a more negative connotation.

2 To control for the quality of education, in addition to spending and duration one could introduce PISA scores for each of the countries into the analysis. Although it is beyond the scope of this article, preliminary correlation analysis shows that student performance on mathematics is significantly correlated to education expenditure and school expectancy as well as UB coverage and collectively agreed working hours (not indicated in table 2). The author would like to thank one of the anonymous reviewers for this suggestion.

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Abstract

The aim of this paper is to explore how labor market institutions (LMIs) interact. First, it looks at the theoretical background and implications for the functioning of the labor market. Second, it offers an empirical overview of which interactions occur on a Europe-wide scale on the basis of pair-wise correlation analysis. It is found that LMIs tend to interact along two axes: one related to the level of coordination in the labor market and the second related to the skill level. Part of the innovation of this paper lies in the use of data – where available – for all 27 EU member states, thereby attempting to bridge the existing divide in the literature between studies performed either on the OECD part of Europe or on the group of former transition economies/new member states.

Key words: labor market institutions, institutional interactions, political economy, pair-wise correlation
### ANNEX: data overview

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Description</th>
<th>N</th>
<th>Countries covered (years covered)</th>
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</thead>
<tbody>
<tr>
<td>1b. Union coordination level</td>
<td>EIRO[2005a]</td>
<td>Importance of bargaining level, codified as: 1 = intersectoral level, 2 = sectoral level and 3 = company level.</td>
<td>25</td>
<td>AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LV, MT, NL, PL, RO, SE, SI, SK, UK. (2005)</td>
</tr>
<tr>
<td>2. EPL</td>
<td>OECD [2004], chapter 2.</td>
<td>Summary indicators of the strictness of employment protection legislation, overall EPL, version 2 (p. 117), scale of 0–6.</td>
<td>18</td>
<td>AT, BE, CZ, DE, DK, ES, FI, FR, GR, HU, IE, IT, NL, PL, PT, SE, SK, UK. (late 1990s and 2003)</td>
</tr>
<tr>
<td>3a. GRR</td>
<td>Aleksynska and Schindler [2011]</td>
<td>Gross Replacement Rates, defined as levels of statutory entitlements over average wages show what percentage of earnings is replaced by benefits; reported are values after the first year of unemployment, after the second year of unemployment, and a simple average for two years of unemployment.</td>
<td>22</td>
<td>AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, UK. (2000–2005)</td>
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</table>
### Variable  | Source  | Description                                                                                                                                                                                                                                                                                                                                 | N       | Countries covered (years covered)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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<tbody>
<tr>
<td>7a. Agreed working hrs</td>
<td>EIRO [2005b]</td>
<td>Average collectively agreed normal weekly hours.</td>
<td>27</td>
<td>AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK. (2005)</td>
</tr>
<tr>
<td>8a. Education expenditure</td>
<td>Eurostat [2011]</td>
<td>This indicator is defined as total public expenditure on education, expressed as a percentage of GDP. Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations. Both types of transactions together are reported as total public expenditure on education.</td>
<td>27</td>
<td>AT, BE (2001–2005), BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU (2001–2005), LV, MT, NL, PL, PT, RO, SE, SI (2001–2005), SK, UK. (2000–2005)</td>
</tr>
<tr>
<td>8b. School expectancy</td>
<td>Eurostat [2011]</td>
<td>School expectancy corresponds to the expected years of education over a lifetime and has been calculated adding the single-year enrolment rates for all ages. This type of estimate will be accurate if current patterns of enrolment continue in the future. Estimates are based on headcount data. To illustrate the meaning of school expectancy, let us take an example: school expectancy for the age of 10 would be one year if all 10-year-old students (in the year of the data collection) were enrolled. If only 50% of 10-year-olds were enrolled, school expectancy for the age of 10 would be half a year.</td>
<td>27</td>
<td>AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK (2001–2005), UK. (2000–2005)</td>
</tr>
<tr>
<td>9b. Employment elderly</td>
<td>Eurostat [2011]</td>
<td>The employment rate of older workers is calculated by dividing the number of persons aged 55 to 64 in employment by the total population of the same age group. The indicator is based on the EU Labor Force Survey. The survey covers the entire population living in private households and excludes those in collective households such as boarding houses, halls of residence and hospitals. Employed population consists of those persons who during the reference week did any work for pay or profit for at least one hour, or were not working but had jobs from which they were temporarily absent.</td>
<td>27 AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK. (2000–2005)</td>
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Wilfred Beckerman’s textbook entitled Economics as Applied Ethics. Value Judgements in Welfare Economics has been published by Palgrave MacMillan. The monograph is intended for students who are completing their studies of economics and are interested in connections between economics and ethics. In the Introduction Beckerman states:

“[A]lthough ... the value judgements inherent in welfare economics are not prominent in economic research or education, students of the subject, or politicians, ought not to be left with the impression that economics is a value-free objective science.” (p. 2).

What exactly the author means by this statement can be fully understood only after reading all 17 chapters of the book.

In Chapter 1, Fact or value? A Simple Example: Sustainable Development and the Discount Rate, Beckerman describes the concept of “sustainable growth” and presents benefits from a decrease of carbon emissions to the atmosphere. He argues that the “optimal degree to which we should cut carbon emissions depends on both the ‘facts’ concerning the probability of catastrophic effects on climate, and a number of ethical considerations.” (p. 14). In particular, these ethical considerations decide how high we value the welfare of future generations as compared with our own welfare, or what is the level of the discount rate which is used in an analysis of costs and benefits of cutting these emissions.

In Chapter 2, Positive Propositions and Value Judgements, the author reminds the reader of the distinction between “positive theorems” and “normative theorems”. Positive theorems inform about what is, and can be true or false. Normative theorems inform about what should be, and their validity can depend on specific aims which in turn depend on value judgements (pp. 17–18, also pp. 226–227 in Chapter 17).

The function of Chapter 3, entitled Fact and Value in Welfare Economics, is to persuade the reader that postulates of welfare economics are always based on “positive” economic knowledge and on value judgements as well. For instance, “positive” economic knowledge tells us that the stability of prices contributes to economic equality and economic efficiency.
Since economic equality and economic efficiency are generally seen as desired, or “good”, the conclusion is that we should try to reach the stability of prices in an economy.

In Chapter 4, *From Individuals’ Choices to their “Welfare”*, Beckerman analyzes the connection between market decisions of economic agents, their preferences and their welfare. For many reasons, e.g. irrational behaviour, asymmetric information, inability to make use of available information, inability to achieve self-control, and various forms of altruism, decisions observed on the market cannot accurately reflect the true preferences and/or the true level of welfare of these economic agents.

Chapter 5 entitled *Pareto Optimality and the Social Welfare Function* analyzes criteria of optimal allocation of goods in an economy. First, Beckerman describes well-known limitations of the possibility of practical use of the concept of Pareto optimum, e.g. the practical impossibility of making compensation payments, a possible conflict of this concept with society’s value judgements concerning the distribution of income, and conservation of the status quo. Second, the Bergson/Samuelson “social welfare function” is analyzed, which is based on an assumption about the possibility of comparing the utility of different people. At this point, Beckerman reminds the reader of Amartya Sen’s critique of “welfarism”, or of the assumption about the determination of social welfare exclusively by the utility of members of society.

In Chapter 6, *From Individuals’ Welfare to Social Welfare*, the author extends his analysis of obstacles that make it difficult to transform individuals’ preferences into their economic decisions and into their welfare, and then into the welfare of society in general. In the author’s view, the method of linking the measure of the welfare of the whole society with individuals’ preferences revealed on the market is unavoidably arbitrary.

In Chapter 7 entitled *Utilitarianism in Welfare Economics*, Beckerman analyzes utilitarianism and its link with the concept of utility maximization as the ethical basis of economics. The main types and the dilemmas of this most influential of all Western moral theories are described, e.g., act utilitarianism and rule utilitarianism; the question of whether an increase in happiness is equally important as a reduction in suffering. For the first time, the most important critical arguments against utilitarianism are formulated.

In Chapter 8 entitled *Some Major Criticism of Utilitarianism*, the main criticisms are discussed in detail in the context of economics. The subjects of analysis are:

1) Utilitarianists’ interest in the consequences of the existence of rules and institutions, not in these rules and institutions as such; this “consequentialism” ignores the fact that people value not only the results of their own actions but also the way these results are achieved.

2) The focus of utilitarianists on the maximization of the utility of the whole society and their neglect of responsibilities of individuals towards particular groups of people.

3) Ignoring by utilitarianists of basic values other than happiness (e.g. equality).

4) Utilitarianists’ assumption about the commensurability of all possible values, which allegedly can be reduced to only one value: utility.
Chapter 9, *GDP and Friends*, presents a short but detailed critique of the GDP. As an alternative or complement to GDP, two approaches are proposed: 1) *objective* indicators of specific components of “welfare”, or so-called “social indicators” such as longevity or education level; and 2) *subjective* indexes of self-rated “happiness”. In this chapter, the first approach is presented, including Amartya Sen’s views and his human development index.

In Chapter 10, *Happiness*, the author elaborates on the discussion begun in the previous chapter by briefly analyzing the achievements of economists who develop the so-called economics of happiness. He is particularly interested in the “Easterlin paradox” and its possible justifications, and in recommendations that the economics of happiness can offer politicians.

In Chapter 11, *Why Equality?*, Beckerman describes a very old debate about distributive justice. His focus is on the possibility of justification of egalitarianism and the question what kinds of inequality are “just”. John Rawls’s “maximin” theory of justice and critical arguments against it (e.g. Robert Nozick’s arguments) are presented in detail.

In Chapter 12, *What Equality?*, Beckerman deepens his analysis of the ideal of equality (justice). He asks the question, what exactly should be equalised in accordance with this ideal (income? welfare? opportunities? Amartya Sen’s *capabilities*?). The author tries to assess these various concepts, taking into account not only justice but also other ethical ideals, such as responsibility for one’s own actions.

Chapters 13 and 14, entitled *The Boundary of Society: The Boundary in Space and The Boundary of Society: The Boundary in Time*, respectively, are about the question of proper geographical and temporal “boundaries” of society whose welfare economists try to maximize. Beckerman states: “Many of the most important applied economic policy problems today go well beyond the boundaries of any individual country or any particular slice of time. So we have to ask ourselves how far we should extend our distributional concern across space and time.” (p. 154)

In Chapter 15, *Discounting the Future*, Beckerman outlines the factors that influence the level of discount rate used in cost-benefit analysis. He analyzes the benefits of public investment projects. Their consequences often reach far into the future and are important for future generations. Beckerman reveals the decisive role of value judgments which determine the discount rate (e.g., their effect is an arbitrary assessment of the utility of future generations as compared with the utility of people who live today).

Chapter 16 of the book, *Valuing Life*, considers assessment of the value of human life for cost-benefit analysis. The net output method and revealed preference method (revealed on the market or in various surveys) are presented. Beckerman extensively describes the critical arguments against these methods, including the argument of John Broome that public investment projects that change the risk of death cannot be assessed on the basis of a compensation test. From the point of view of politicians who represent the whole society, rather than the point of view of an individual citizen, abandoning
such a project equals the certainty of someone's death. It means that no compensation payment can be seen as high enough to balance the losses incurred as a consequence of giving up this project.

***

Beckerman has a very rare gift for simple explanations of very complex and important issues. In addition, the problems he describes are among the most surprising and exciting in economics. His book is full of deep ideas, penetrating remarks, detailed information and quotations from the latest publications. In effect, this erudite and witty book extends the reader's horizons and stimulates the imagination.

However, in my opinion, the general framework in which the author presents his detailed arguments has one important shortcoming. Using many examples, Beckerman over and over again emphasizes the alleged “value-loadedness” of welfare economics. The last chapter of the book entitled Overview: Value Judgements in Welfare Economics is a summary of all these approaches. Generalizing his arguments, the author points out that the variant of the allocation of goods recommended by most economists is not the best variant. The reason that welfare economics recommends an allocation of goods which is not optimal, according to Beckerman, are “numerous value judgements ... embedded, sometimes deeply, in the structure of welfare economics.” (p. 226). Here are some examples of these “value judgements”:

1. Economists who recommend a specific allocation of goods in an economy as a Pareto-optimal allocation ignore the fact that prices in this economy depend, among others, on distribution of income between members of society. Any change of this distribution of income causes changes of these prices which, in turn, causes a new allocation of goods that becomes the Pareto-optimal allocation. The result is that economists who recommend an optimal allocation of goods in an economy as a Pareto-optimal allocation implicitly accept the existing income distribution in this economy.

2. Economists assume that consumers’ decisions adequately represent their preferences and their pursuit of “welfare”. Yet, many decisions of buyers are influenced by asymmetric information. Such decisions often do not reflect real preferences of these consumers. Additionally, sometimes fulfilling preferences cannot be seen as pursuit of welfare, since certain kinds of preferences cannot be accepted but should be censored (e.g., sadists’ preferences). Once again, economists who search for the optimal allocation of goods in an economy ignore these generally known problems.

3. Likewise, economists ignore problems with constructing a rational connection between individuals’ welfare and social welfare (an example of such problem is described by Arrow’s impossibility theorem). In effect, methods of linking social welfare with the welfare of individuals are unavoidably arbitrary. The objection to arbitrariness also affects the ideal of justice and the concretization of this ideal. For example, should politicians who take collective decisions equalize income or perhaps should they equalize Amartya Sen’s capabilities? And if they should equalize income, should it be, e. g., income per capita or household income?
4. Traditionally, as the best variant of the allocation of goods, economists prefer the variant which maximizes the utility of consumers. Yet Beckerman points out that such an economic goal is not obvious at all. As Robert Nozick and Amartya Sen state, utilitarianists ignore basic values other than happiness (e.g., the integrity of certain laws, such as property rights).

5. Furthermore, when recommending the optimal variant of allocation of goods in an economy, economists very often ignore interests of inhabitants of other countries and interests of future generations.

6. Economists’ decisions can be equally arbitrary about the level of the discount rate which is used in the analysis and about the method of assessment of the value of human life.

In my view, arguing this way, Beckerman mostly describes not “impregnation” of welfare economics with ethical value judgements, but numerous simplifying assumptions arbitrarily accepted by welfare economists. Accepting these assumptions often results in detachment from reality and reduces the practical importance of economic analysis. When Beckerman states that welfare economics is not value-free objective science (p. 3), one gets the impression that he sees welfare economics as a science which is inherently different (“normative” and not “positive”) from physics, biology and other empirical sciences. However, physicists and chemists also use numerous simplifying assumptions which are similar to assumptions 1–6 enumerated above. For instance, it happens that physicists ignore the impact of air resistance on the speed of objects which are falling in the gravitational field, and chemists ignore the potential impact of contamination of the investigated substance.

***

Sporadically, Beckerman also uses other arguments for the thesis about value-loadedness of welfare economics. Here are some examples:

1. Beckerman states that value judgements cannot be separated from the rest of welfare economics so that it becomes “a pure value-free positive economics.” In his view, the reason is that “economists’ personal value judgements influence their choice of questions to study and their selection of the relevant empirical information.” (p. 17).

Yet, the lengthy arguments regarding the normative character of welfare economics do not concern value judgements, which determine the choice of subject and the method of inquiry. Such methodological value judgements (as Mark Blaug calls them) are accepted in all sciences (Blaug 1992, chapter 5; Blaug 1998). They do not differentiate welfare economics from meteorology or geology, which are generally seen as positive sciences building objective knowledge. Such value judgements that may control the choice of simplifying assumptions used in analysis, as described above, are in my opinion methodological value judgements in Blaug’s sense (generally, they determine the method of investigation). Debates about the normative character of welfare economics concern ethical, moral, aesthetic, and ideological value judgements, and not methodological value judgements.
2. Analyzing the example of the minimum wage, Beckerman argues that when economists recommend certain economic policies, they always accept a specific mix of statements of fact and value judgements. For instance, when economists opt for minimum wage legislation, the choice is motivated first by the fact that, in their opinion, the minimum wage will lead to an increase of the lowest category of earnings; and second, their aim is to reduce differences of income in society (pp. 27–30). Consequently, Beckerman concludes that welfare economics is not a value-free objective science.

In my opinion, this conclusion is wrong. Surprisingly, in Beckerman’s monograph I didn’t find the author’s answer to Pieter Hennipman’s (and Yew-Kwang Ng’s, and George C. Archibald’s) convincing arguments for the thesis that welfare economics is a positive science, as value-free as, e.g., astronomy. The argument was repeated by Hennipman many times during debates with Ezra J. Mishan and Mark Blaug (Hennipman 1976, 1982, 1984a, 1984b, 1992, 1993; cf. Archibald 1959, pp. 320–321, Ng 1992, p. 6)\(^5\). Hennipman holds that welfare economics, like any other empirical science, may be seen as a set of positive statements that can be classified as true or false. They are true or false statements about the efficiency of different means of pursuing given ends. For instance, in the case of chemistry, the end can be production of aspirin, and in the case of welfare economics, the end can be maximization of total surplus. Whether someone will use chemistry or welfare economics to reach the ends depends on whether he or she values aspirin or total surplus. Such action, as every conscious action, does require a certain value judgement. But that does not mean that either chemistry or welfare economics is itself “value loaded”.

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**Notes**

1 Wilfred Beckerman was born in 1925 and is Emeritus Fellow of Balliol College in Oxford and Visiting Professor of Economics at University College London. He has also worked as an adviser for the World Bank, United Nations, OECD and ILO.


3 In the Annex to Chapter 13, after analyzing the crucial aspects of international distributive justice, Beckerman proposes a specific solution for the problem of how to allocate costs of preventing climate change among various countries. Further, in Chapter 14, he analyzes questions such as: “Do we have obligations to future generations?”; “Do future generations have the right to inherit the same environment as exists now?”; and “What is a just distribution of the Earth’s resources between us and future generations?” (p. 178).
Likewise, in Beckerman’s view, choices of definitions are value judgements as well. For instance, on pp. 150–153, the author describes the choice of a specific definition of “income” used in comparisons of various countries at various times as a value judgement (e.g., it can be an annual income, a lifetime income, an individual’s income, a family’s income, or a household’s income). The result is that in Beckerman’s sense every physical science (e.g., physiology) is full of value judgements, since every physical science is full of definitions.

As we know, the result of this discussion was that Mishan stopped defending the concept of “normative” welfare economics and accepted Hennipman’s position (see Mishan 1984; cf. Czarny 2010 p. 165).

References

On 28 and 29 May 2012, the seventh international conference organized by the World Economy Research Institute of the Warsaw School of Economics was held in Warsaw. The main topic of the conference was: “Innovation and Education: Drivers of National and Regional Competitiveness in the 21st century”. The conference was held under the honorary patronage of the Minister of Economics. In addition, several media partners were engaged to promote the conference, including economic journal Gazeta Bankowa, the e-portal of the editor, Nowy Przemysł, and Portal Innowacji.

The main goal of the conference was to stimulate discussion between international researchers conducting empirical and theoretical analyses in the area of education, innovation and competitiveness of firms, countries and regions. In addition, the conference focused on economic policy implications of the recent research. The main research areas of the conference were as follows:

- The issues of innovation systems at the macro and micro level and their role in the process of building the competitive advantage of countries, regions and enterprises;
- Education policies and their impact on human capital development, and the innovation potential of countries or enterprises;
- Research on innovation and education issues as well as recommendations for Polish economic policy.

Several scientific papers were submitted for conference-related topics. The conference speakers represented research centers from 10 countries: Poland, Hungary, Austria, the United States, Romania, Germany, Latvia, Estonia, Kazakhstan and Belarus. The first day of the conference focused on “Achieving Competitiveness through Education”. The conference was opened by the former Dean of the Collegium of the World Economy, Prof. dr hab. Jolanta Mazur. The topic of the first session was: “Economic Convergence and Competitive Position: Poland in the EU” and included the presentation of the recently published book “POLAND Competitiveness Report 2012: Focus on Education”. This report presented an analysis of Poland’s competitive position in
2011 compared with other EU countries and especially with the main Polish trading partners. The comparative analyzes of the report included both qualitative and quantitative perspectives. In addition, options for possible development of the Polish economy were discussed and economic priorities were presented to improve competitiveness and achieve a better-endowed society.

The second session of the first conference day focused on sharing best practices: “How to Speed up Innovations and Improve the Competitive Position of Firms, Regions and Countries?”. Speakers from Hungary, Austria, the United States and Poland contributed to this session. The third session of the conference was conducted as a panel discussion on the topic: “Building Skills for Innovation and Competitiveness in the 21st Century”. Representatives from the government sector, such as the Ministry of Economy and the Ministry of Education, as well as representatives of the business sector took part in this panel debate. The first day of the conference finished with a session on: “Science and Education in the Knowledge Economy”. This conference stream focused on issues related to entrepreneurship and education and their influence on innovation and competitiveness.

The second day of the conference concentrated on “Innovation, Human Capital and Competitiveness”. The discussion was opened by Prof. dr. hab. Marzenna A. Weresa, the Director of the World Economy Research Institute, who presented the results of a research project on “Human Capital, Innovation and Long-Term Trade Competitiveness: Implications for Poland” financed by the National Science Center. The main goal of this project is to broaden the knowledge on economic growth and competitiveness factors, including the influence of innovation and human capital on building competitive advantages in international trade.

The next session of the second conference day provided a chance for exchanging ideas on “Innovation Systems and Competitiveness in the World Economy”. In this debate, researchers participated from Germany, Latvia, Estonia, Poland and Kazakhstan. The last session of the conference was dedicated to reflections and observations on human capital development and competitive position of companies, regions and countries in times of economic downturn.

In addition to the exchange of knowledge and research outcomes, the conference enabled discussions and opened the possibility for setting up research relations with experts from many international scientific centers specializing in competitiveness, education and innovation issues.