Index of Modern Social Market Economies

Explorative Study



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INTRODUCTION

Stefan Empter, Cortnie Shupe

The current global financial and economic crisis has provoked widespread debate in market economies around the world about how to regain a balance between profit and liability, efficiency and equity and between growth and social-ecological justice in national economic and social orders. Against this background, many, in particular in Europe, have become interested again in the social market economy model as a framework for responsible capitalism.

This growing interest stands in contrast however to the fact that there is no clear definition of the model and the principles and institutions that constitute a social market economy. It was this that prompted the Bertelsmann Stiftung to design a framework to fill the gap. With its pilot project, the "Index of Modern Social Market Economies" (MSME Index), the Bertelsmann Stiftung and the Center for Applied Economic Research at the University of Münster (CAWM) sought out to define and measure the features of a modern social market economy and to assess the extent to which the economic orders of eight evaluated countries meet these criteria.

In contrast to indices that measure short-term economic performance, the MSME Index focuses predominantly on the structural and institutional features of economic orders.

Institutions in the evaluation encompass legal frameworks and policies, rules and regulations and also a collection of social and economic rules and practices in which specific policies are embedded. In this sense, the index assessments take into consideration both formal de jure as well as the de facto institutions within each country.

The economies studied are those of Canada, France, Germany, the Netherlands, Spain, Sweden, the United Kingdom and the United States. They were selected in order to provide the necessary degree of variance among countries that identify their economic and social models as social market economies as well as between countries that have this goal and more liberal economies that do not.

As part of a larger program undertaken by the Bertelsmann Stiftung, entitled "Shaping Sustainable Economies", the concept behind the MSME Index is informed by a broad understanding of well-being and social progress and the conviction that a modern social market economy can only be measured according to criteria such as economic viability, social and generational justice, participation and sustainability. It must furthermore prove resilient yet dynamic faced with systemic pressures such as economic globalization, global warming, demographic change and the evolution of social expectations.



The social market economy, as an economic order, emerged from a distinct historical background in the context of German history and philosophy and the ideas of its founding fathers, in particular Walter Eucken's concept of a competitive market economy, served as an inspiration for the index concept. However, given both the challenges and societal expectations of today, it would not suffice to simply measure traditional German-style capitalism or the degree to which economies today measure up to Eucken's principles. It was not without reason that Alfred Müller-Armack, who built his work upon Eucken's ideas and was in 1946 the first economist recorded as using the term "social market economy", placed a significantly stronger focus on social policy. While Eucken did take note of issues such as environmental protection, which demonstrated incredible prescience for his time, his concept underestimated the importance of social inclusion and in particular, social mobility, both of which find consideration in the MSME Index.

In addition to modernizing the concept to reflect global challenges as well as the evolution of societal values and the expectations of today, we have defined the institutions broadly enough to include functional equivalents and similar features of the institutions we seek to measure that exist in other countries. In fact, not only Germany, but many other countries exhibit features of a social market economy that should also find consideration in the concept. For these reasons, we added "modern" to the title of the index in order to emphasize the necessary adaptation of Eucken's principles to do justice to these demands.

Using both qualitative and quantitative indicators, the MSME Index measures the existence and quality of the central institutional principles that comprise a modern, sustainable social market economy. For the purposes of clarity, these principles are ordered according to 4 thematic categories.

Quantitative data comes from the OECD, World Bank, International Monetary Fund, the World Economic Forum and other organizations. For the remaining data necessary to complete the index, but for which no external sources could be found, the project team drew up a questionnaire for expert review. Answers to the questionnaire included both a numerical score as well as an accompanying, written elaboration. The latter have been combined and summarized in the country reports, all of which are published separately from this report.

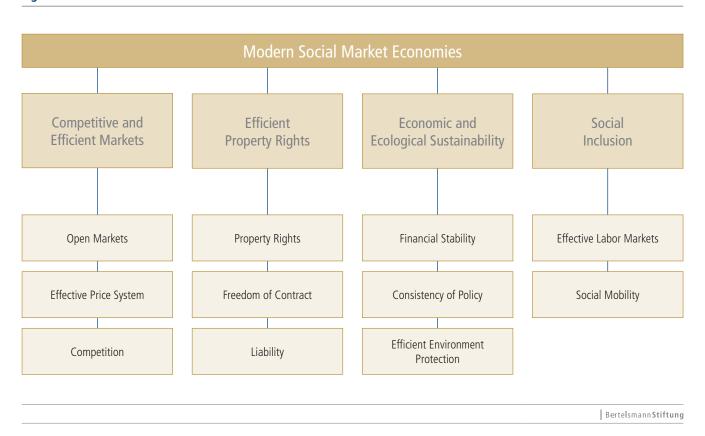
This following summary marks the end of the first stage of this project in which we sought to test the robustness of the concept and gain insights into the strengths, weaknesses and trade-offs of modern social market economies. Expert evaluations provided in the form of the country reports offer a fascinating wealth of information about the interaction between individual institutions and lend credence to Eucken's assertion that the principles of the social market economy only demonstrate strength in their entirety, as an inseparable set of institutions.

This explorative study is the result of a collaborative effort among many involved in the project, whether as conceptual partners, expert coordinators, or country evaluators. Their input was invaluable. Our partners at the Center for Applied Economic Research (CAWM) at the University

of Münster included Ulrich van Suntum, Tobias Böhm, Jens Oelgemöller and Cordelius Ilgmann. Gosta Esping-Andersen and Felix Hüfner served as expert coordinators. The summary report is based on information provided by the country evaluators: Benito Arruñada, Andreas Busch, Nagore Calvo Mendizabal, Stephen Gross, Bob Hancké, Friedrich Heinemann, Sven Jochem, Anke Kessler, Jacques Mistral, Ola Olsson, Kees van Paridon, Friedbert Rüb, Willi Semmler, Andrew Sharpe, Henrik Uterwedde and Frans van Waarden as well as by the expert coordinators. We furthermore appreciate contributions from Christina Busch, data collection from Dr. Margit Kraus and editing work by Tim Judah.

Additionally, we would like to thank external experts who provided suggestions to further improve the concept during workshops in Cologne, Münster and Berlin throughout 2010 and 2011. Last, but not least, we sincerely appreciate the efforts of colleagues at the Bertelsmann Stiftung who provided logistical and organizational assistance or helpful comments and suggestions for the concept, in particular Pia Paulini, Eric Thode, Daniel Schraad-Tischler, Thieß Petersen and Benjamin Broßmann.

Figure 1: Modern Social Market Economies





DEFINING A MODERN VERSION OF THE SOCIAL MARKET ECONOMY

Ulrich van Suntum, Tobias Böhm, Jens Oelgemöller and Cordelius Ilgmann

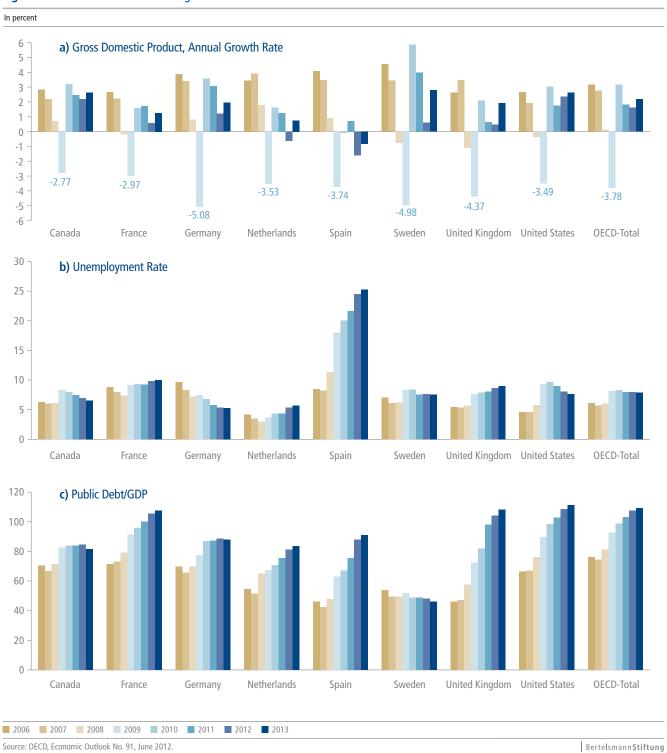
INTRODUCTION

During the worldwide financial crisis following the Lehman crash in 2008, western industrialized countries performed quite differently in preserving high employment along with sound public finances and a social balance. Nearly all of them were hit by a GDP slump of historic proportions in 2009, above all the export-oriented economies of Germany and Sweden (Fig. 1a). By contrast, these countries did well in shielding their labor markets from the consequences of the crisis. Germany even managed to lower its unemployment rate during the crisis (Figure 1b). After having been named the sick man of Europe at the turn of the millennium (Sinn, 2003, p.18), it now appeared to have become the economic powerhouse of Europe. In contrast to the so-called German "Jobwunder", most other countries suffered from a severe increase in unemployment rates. This was particularly true for the US, which had often been looked at as a shining example of the virtues of a flexible labor market before the crisis. Moreover, big continental European countries like France and Spain performed weakly during the crisis. Their unemployment rates, already relatively high, increased considerably and public debt climbed to alarming heights, eventually resulting in the European debt crisis. On the other hand, among the Anglo-Saxon countries, Canada in particular, performed relatively well, both in terms of employment and public finances.

Miracles are rare in economics, so it makes sense to search for some better explanation for such astonishing differences in economic success, particularly concerning crisis-resistance. In the cases of Germany and Sweden, common macroeconomic analysis cannot explain much. Neither have there been exceptional Keynesian growth programs, nor did excessive deficit spending take place. On the contrary, while Germany's public debt rate increased only moderately during the crisis, Sweden and Canada even managed to keep it broadly unchanged (Figure 1c).

On the other hand, there had been considerable structural reforms in both countries in the years running up to the crisis. The IMF (2011, p.6) attributes German labor market performance to several factors including the "Hartz IV" reforms and also the flexibility incorporated into collective labor agreements, e.g., work-time accounts, and the subsidy for reduced work-time hours (*Kurzarbeit*). Particularly for those unemployed who are not tied down with childcare duties, the incentives to work rose substantially and new forms of part-time labor and temporary employment emerged. A major part of the German job miracle was certainly due to these reforms, although the larger part of the population paid for them with stagnating real incomes.

Figure 2: Economic Performance During the Crisis





Concerning Sweden, there had been a remarkable change in economic course from the former "Volksheim" welfare state to a much more market-oriented policy (Palme 2008), although it still includes high levels of income tax and a prevailing emphasis on social security and compensation. Thus it seems that both countries have found compromises between economic equity and efficiency that are worth investigating in more detail. Apparently, this is more a matter of institutions than a matter of conventional economic "measures". Moreover, in order to properly assess the issue, one has to take into account the economic history of the respective country. Economic institutions are neither easily invented nor easily changed, but always a result of economic thinking and culture. This of course does not mean that they should not be modernized and adapted to new economic challenges. However, to a certain extent at least, relevant changes in economic institutions require considerable change in normative positions and political traditions as well.

In order to learn from each other, a careful analysis comparing institutional arrangements and their interactions, as well as explaining their comparative advantages must be conducted. This is the aim of this chapter. In particular, the German concept of a social market economy, in contrast to Anglo-Saxon market liberalism, is traced to its basic roots and then in a subsequent step, modernized such that it can be reconciled with contemporary economic theory, practical economic and societal challenges and the expectations of our times. As such, the model is an ideal type and should not be confused with the German economic model of today. In fact, many other countries, notably in Scandinavia, have characteristics of what we would consider a modern social market economy, although without being labeled as such. Thus, we do not try to define Germany's form of a social market economy as a benchmark against which other countries are evaluated. Rather, our purpose is to clarify the basic idea, fundamental meaning of, and the relationship of institutional arrangements to the concept of the social market economy. This seems to be ever more necessary, as during and after the crisis the social market economy has been highlighted in several discussions as an important factor of Germany's success during the financial turmoil. However, the original meaning of the concept needs to be clarified and distinguished from various existing forms of it. Presenting clear definitions of the principles of the social market economy helps us to understand the interdependencies of institutions as well as to evaluate and discuss other economic models against this background.

THE ORDOLIBERAL CONCEPT OF A (SOCIAL) MARKET ECONOMY

The social market economy as an economic order is not just words, but has a very distinct historical background. It entails a system of intertwined institutions that, in their entirety, are indispensable for the functioning of the entire concept. Without one of the functioning principles, the concept does not hold. At the very root of the idea lies Walter Eucken's idea of a competitive market economy (Müller, 2007, p. 101). His research question, which all ordoliberal authors of the time shared, albeit coming up with different answers, was, "How can a modern industrialized

¹ See Lindvall (2006) for a brief overview of Swedish reforms.

economy and society be organized in a human and efficient way?" (Eucken 1951, p. 27, see also Eucken, 1950). While several other figures such as Alfred Müller-Armack, Wilhelm Röpke, Alexander Rüstow, Franz Böhm and Ludwig Erhard also belonged among the founding fathers of the social market economy concept, Eucken's early work from the 1930s offered the most elaborate normative system of economic governance and shaped the later discourse around the subject.

Being disillusioned by what he called the "age of experiments"- the failure of both classical liberalism and socialism - Eucken formulated eleven principles of institutional design for what he called a market economy, in which competition would not only limit the extent of private economic power, but also lead to an efficient allocation of resources. By designing constitutional rules for the economy, Eucken not only hoped to create economic prosperity, but also end prevailing rent-seeking in capitalist societies. After the Second World War, the German ordoliberals – with Erhard being their most prominent and powerful figure – invented the concept of the social market economy, which strove to combine core elements of market competition with a considerable degree of social policy and hence public consensus (Goldschmidt and Wohlgemuth, 2008).

All ordoliberals agreed on the notion that a truly liberal economy was not a given per se, but required careful institutional design. Hence they argued in favor of a fixed set of rules for economic activity that would limit both private economic power and public interventions in the market process. Indeed, they argued that political freedom would prove impossible as long as economic order would grant some individuals power over others (Yeager, 2005, p. 508). In many respects, close links exist to the Austrian school of economics, in particular to Hayek, who directly followed Eucken as the department chair in Freiburg.² However, essentially, Eucken's concept was less evolutionary than Hayek's and puts much more emphasis on a strong, although liberally oriented state.

The essence of the ordoliberal concept of a market economy lies in what Eucken deemed the constitutive (C) and regulative (R) principles in his work of 1952 (see Table I).³

Although Hayek was not a member of the original ordoliberal school and proposed a more fundamentally liberal view, he was quite close to Eucken in many respects. Hayek twice held a chair in Freiburg and was even appointed as the president emeritus of the Eucken Institute in 1978. For more on their relations see Pies (2001).

³ See also Richter (2011); the English translation is borrowed from Peukert (2000, p.122).



Table 1: Eucken's Constitutive and Regulatory Principles

C1	Effective Price System
C2	Primacy of Monetary Policy
C3	Open Markets
C4	Property Rights
C5	Freedom of Contract
C6	Liability
C7	Consistency of Economic Policy
R1	Competition Policy
R2	Income Policy
R3	Correction of Externalities
R4	Correction of Abnormal Labor Supply

Source: Eucken 1952 Bertelsmann Stiftung

The seven constitutive principles can be briefly described as follows:

- (C1) A functioning price system represents the fundamental principle according to Eucken. He regarded a decentralized market structure as the only road to success for entrepreneurs to deliver value to customers and clients as opposed to employing hindering, anti-competitive strategies and abusing their market power.
- (C2) By primacy of the monetary order Eucken mainly had in mind the stability of the value of currency, an idea that became the cornerstone of the Bundesbank's mandate and policy.⁴
- (C3) Open markets mean the absence of prohibitive tariffs and other restrictions on free trade, and also of any form of anti-competitive measures to protect the home market.
- (C4) Private property is meant mainly as a means of power distribution which must, however, be bound by competition.
- (C5) Freedom of contract is proposed only to the extent that it is compatible with perfect competition, e.g., as long as it does not support cartels or any other abusive practice.
- (C6) The principle of *liability* addresses in particular corporate law.⁵ Indeed many of the problems addressed by principal-agent theory, moral hazard and, more generally, informational asymmetries are to be found in this principle.

⁴ Eucken's technical proposal on this issue was a commodity-bundle standard instead of the gold-standard and a 100% reserve require-

ment for banks, i.e. a combination of the plans by Graham (1937) and Simons (1948).

⁵ Euckens radical view on this issue was that the majority stockholders should be fully liable.

(C7) *Continuity of economic policy* means that the latter should be both reliable and predictable for market participants (Grossekettler, 2010, p.324).

The constitutive principles are complemented by four regulative principles (Peukert, 2000, p.124):

- (R1) *Antitrust policy* should be conducted by a public agency which should ideally dissolve monopolies or at least control their market behavior. This proposal led to the 1957 German law against barriers to competition.
- (R2) *Income policy* was mainly associated with a progressive income tax, both for distributional and efficiency reasons, the latter because it dampens the production of luxury goods and thus gives room for more investment.
- (R3) *Correction of externalities* is mainly discussed by Eucken in ecological terms, pointing for example, to the destruction of North American forests.
- (R4) *Correction of abnormal labor supply* means regulations on the length of the working day and other protective measures for workers, in particular for women and children.

Eucken's concept provided the basis for Germany's economy after World War II, but it was substantially supplemented by more social elements. In particular, Müller-Armack and Erhard modified the concept to allow for "market conform" interventions, an active business cycle policy, and by placing a much stronger emphasis on welfare policy including social housing, pensions, health and family aid policy (Müller-Armack, 1946). It was by then widely acknowledged that welfare policy should go beyond simple income redistribution, including, for example, substantial labor protection.

The further development of the social market economy was more eclectic and policy-driven rather than following a well-defined concept. In particular the distributive and corporative elements soon played a much larger role than was originally intended by Erhard (Wehler, 2008, p.75 and 133). For example, labor market institutions specific to Germany, like worker participation in both operational management and on management boards, originated from the powerful role of unions, which were thus integrated into the new economic and social order. Consequently, a mixed system prevailed, more accurately described as "Rhenish Capitalism" than a social market economy It incorporated various strands of thought – such as those of the Catholic social school or those of Social Democrats and existing institutions.

Nevertheless, and despite the lack of a formal theoretical foundation,⁶ the social market economy proved extremely successful in the years from 1948 to the mid-1960s, thereby laying the foundations

⁶ Unlike other members of the school, Eucken was an exceptionally clear economic thinker who explicitly abhorred what he called "pure word economists", ("Begriffsnationalökonomen", see Grossekettler 2010, p. 296).



of the "Wirtschaftswunder" (Wehler, 2008, p.74). Beginning in the early 1970s, the degree of regulation in Germany's economy temporarily increased with a rising share of public expenditure and state intervention, accompanied by much weaker economic performance. However, in the early 1980s, the liberal idea was reestablished by substantial deregulation and liberalization, e.g., in the telecommunications, energy and transport sectors. After reunification, substantial deregulation of the labor market was implemented as well, including the so-called "Hartz" reforms referred to above, and which were named for the head of the relevant round-table commission of the time. Nevertheless, the German labor market remained aloof from a hire and fire system, and social security expenses still total approximately 25 percent of GDP. In these and many other ways, the social market economy concept is still intact in Germany, including medium levels of both income equalization and public expenditure shares by international comparison (Figure 2).

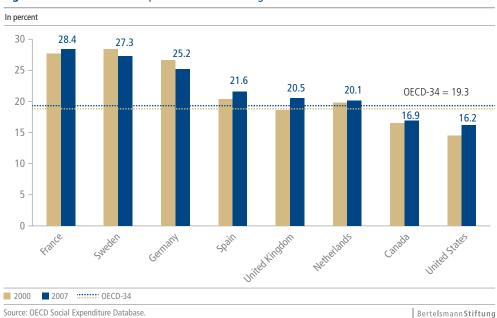


Figure 3: Total Public Social Expenditure as a Percentage of GDP

As noted above, many other countries, particularly the Nordic states, have at least partly developed characteristics similar to the concept of a social market economy, although mainly derived from their own history and experience and not explicitly borrowing from the ordoliberal school. Hence it is reasonable to reformulate the concept by taking into account their particular institutional designs and experiences as well. One key task in doing this is to detect and redesign those parts of the economic, legal and political institutions which have given rise to economic and political rent-seeking, thereby causing economic inefficiency and growing social inequality as well.

⁷ See Wurzel (2006) who investigated German labour market reform. Atkinson and Micklewright (1991) show that higher transfers to the unemployed increase the duration of unemployment. A general survey of labour market intervention is given by Heckman et al (1999).

MODERNIZING THE CONCEPT OF A SOCIAL MARKET ECONOMY

In light of contemporary economic theory, Eucken's original contribution still turns out to be particularly attractive. It not only anticipates important ideas like the concept of time inconsistency and the principal-agent problem, but also forms a consistent set of interdependent institutions, without any of which the entire concept would become invalid. Only the interplay of the entire set of principles and the institutions derived from them comprise his model of an ideal market economy. Moreover, a surprisingly modern aspect of ordoliberalism is the interdisciplinary approach of bringing together law, politics and economics, although it never led to a really interdisciplinary body of thought (Goldschmidt and Wohlgemuth, 2008, p. 264).

Sixty years have passed since Eucken's principles were published in 1952. The world has changed a great deal since then, and so have individual behavior and social values. Thus the original version of the social market economy undoubtedly requires substantial modernization to meet the challenges of our time: Globalization, ecological exploitation, demographic change and evolving social values and expectations to name but a few. Therefore, one has to reconsider the fundamental content of a social market economy, and to verify whether it remains a relevant and appropriate concept today. Given the current turmoil on the financial markets and the euro crisis, this urgently needed reformulation is relevant for the European economy as a whole.

Although the original concept of a social market economy already emphasized the importance of non-material goods such as political stability, individual freedom and human dignity, current debates increasingly revolve around fostering well-being and enabling broad political participation as well as social mobility and inclusion. This new understanding of economic prosperity and sustainability must be taken into account. Generally, social values have changed substantially, in particular with respect to the importance assigned to economic growth and both the definition and relative weight of social justice. Social justice requires policies that enable inclusion rather than compensating for exclusion (Schraad-Tischler, 2011, p.11). The modern social market economy (MSME) Index therefore measures social mobility comprehensively, including early childhood education, permeable and flexible education structures as well as functioning labor markets and a tax and benefit system that balances redistribution with incentives to work.

Institutional approaches to economics are not purely German. Many ordoliberal ideas can be found in both constitutional economics and new institutional economics (NIE) (Klein, 2000). Ordoliberalism and NIE share a commonality in that they both go beyond a predominantly mathematical approach to economic models and instead take on an historical and institutional perspective. In particular, both of them place emphasis on long-range institutional conditions rather than on the measurement of short-term economic outcomes. An important difference lies in the fact that NIE

⁸ The problem of time inconsistencies was first formulated by Nobel Prize winners Kydland and Prescott (1977). Their insight and the subsequent literature are summarized in Klein (2009).



concentrates on the positive study of economic systems and seeks to improve economic efficiency in a technical sense, while ordoliberalism takes a normative approach, inquiring into which rules and institutions could ensure best a workable, stable and sustainable economic order (Shupe, 2012, p.2). As such, to ensure individual freedom, Eucken and his ordoliberal followers mainly aimed to circumvent power accumulation and privilege. In this way ordoliberalism sets up an ideal type system of institutions for long-run economic success and sustainability.

The principles of a social market economy, however established and designed, must in the end pass the empirical test of delivering on their promises.

To begin with, for a modern interpretation, it does not make much sense to maintain the distinction between constitutive and regulative principles. Contemporary institutional economics covers both general rules and procedures. Moreover, some of the principles in Table 1 are closely related to each other, so their number can be reduced.

In particular, we suggest rearranging the principles into four categories according to Table 2:

Table 2: Categories and Principles of a Modern Social Market Economy

Categories	Principles
Competitive and Efficient Markets	Open Markets
	Effective Price System
	Competition
Efficient Property Rights	Property Rights
	Freedom of Contract
	Liability
Economic and Ecological Sustainability	Financial Stability
	Consistency of Policy
	Efficient Environment Policy
Social Inclusion	Effective Labor Markets
	Social Mobility

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- (1) Open markets, competition and an effective price system all refer to decentralized allocation decisions in a competitive system. Thus they can be summarized as the general principle of *Competitive and Efficient Markets*. Unlike Eucken's narrow yardstick of perfect competition, the concept should now refer to modern competition theory.⁹
- (2) Analogously, the principles of efficient property rights, freedom of contract, and liability can be headed by the general principle of *Efficient Property Rights*. Here the results of both welfare economics and modern institutional economics, concerning for example the principal-agent problem, are taken into consideration. The internalization of externalities can also partly be subsumed under this heading since, in general, internalization works through generating property rights in order to create a price for the externality. Thus, aspects surrounding the protection of intellectual property rights are also allocated under the principle of "property rights".
- (3) There is also a close link between consistency of policy, financial stability, and efficient environmental protection. ¹⁰ All of these principles refer to sustainability in the sense of long-term oriented behavior, hence they are subsumed in the category *Economic and Ecological Sustainability*. This problem is also discussed under the heading of time consistency in contemporary economics.
- (4) Finally, Eucken's regulative principles of income policy and correction for "abnormal labor supply" are both related to the large field of welfare policy, including social mobility and the legal constitution of the labor market. These issues are no longer discussed in terms of mere income support measures today, but in the much broader context of *Social Inclusion*.

Of course, neither economic theory nor social values are undisputed issues. Any statement of fundamental economic principles is normative, to a certain extent at least. The more important issue is, however, that such principles are consistent both with each other and with the state of contemporary economic theory. In the following we argue that this is the case with the set of principles here proposed as constituting a modern social market economy.

OPERATIONALIZATION

After dividing the concept of the modern social market economy into four categories whereby each one consists of two or three principles that can be traced back to Eucken's original work, indicators were selected that measure the existence and quality of these principles. Our set of indicators provides information for each aspect of these principles and categories. The first category measures to which degree markets are allowed to work freely to the benefit of the society.

⁹ See, for example, Tirole (1988) and Carlton and Perloff (2005).

¹⁰ The latter was tackled by Eucken under the heading of externalities.



CATEGORY I: COMPETITIVE AND EFFICIENT MARKETS

The core element of the first category of principles, called *Competitive and Efficient Markets*, is, as the name suggests, *competition*. For an economist, this may be more or less self-evident. ¹¹ Leaving apart specific problems like externalities and asymmetric information, economists widely agree on the general application of the so-called first theorem of welfare economics. According to this, competition generally ensures a Paretian solution of the allocation problem, i.e., within given endowments, the welfare of one cannot be improved without reducing the welfare of someone else. ¹² Although the theorem is only derived from mainly static, abstract economic models, it is also supported, in principle, by more dynamic concepts of competition theory. ¹³ Admittedly, there are many different views of particular problems like natural and morphological monopolies, the efficiency of oligopolies, and the relevance of market structure versus market behavior. In essence, however, there is widespread agreement that decentralized units with a minimum of market power should make allocation decisions, and that public interventions should generally favor more rather than less competition. Hayek famously made the even more fundamental point that the core problem of allocation is the aggregation of vast amounts of information, dispersed among millions of decentralized market participants that can never be elicited by any public agency.

In general, one has to define a set of rules that would ensure that competition prevails over any form of concentrated market power, whether private or public. To achieve this, open markets, an effective price system and also an effective legislation against monopolies, cartels and abuse of market power are necessary. The last element also distinguishes the concept from simple laissez-faire liberalism (Peukert, 2000).

An *effective price system* not only rules out private market power and price-agreements, but also price controls and related interventions, except in the presence of market failures such as externalities. Generally, this notion rejects minimum and maximum prices in order to pursue distributional goals. The reason is twofold: First, such interventions would destroy the informational content of prices and hence, the efficiency of allocation. Second, price interventions can hardly be carefully targeted with respect to social problems, because they also benefit those who are not really in need. Consequently, the preferable instrument for social targets is income policy rather than price intervention.

Open markets, in particular free trade and international factor mobility, present another component of competition. In light of economic theory, the former can be a substitute for the latter, although an imperfect one. The problem caused by competition from abroad is that its restriction carries advantages for the home country, at least for some pressure groups there. On the other hand, from

¹¹ See Mas-Colell (1995) and the literature cited therein.

¹² See, for example, Mas-Colell et al. (1995), chapter 10.

¹³ The gap between theory and reality, especially the issue of imperfect information, is discussed by Stiglitz (2002).

a global and long run point of view, open markets are the much better option in most cases, as international trade theory has convincingly shown. However, because open markets have a public good character, they often exhibit a tendency to self-destruction and thus can only be preserved by international agreements like GATT and the WTO.

Concerning monopoly and cartel legislation, there are quite different approaches in practice, depending on the underlying concept of competition. For the same reason, it is not easy to measure the degree of competitiveness in most markets. A natural monopoly, under substantial pressure from substitute goods, may act more competitively than a firm within a stable oligopoly, for example. Moreover, prices need not be competitive or even low when they equal unit costs, because the latter may be artificially inflated. Therefore, the relevant information concerning competition is, to a lesser extent, the market structure or market results than the prevailing market power, which can be measured by various concepts. 14

Table 3: Principles and Indicators of Competitive and Efficient Markets

Principles	Indicators	
Open Markets	Controls on Capital Movement	
	Freedom of Migration	
	Barriers to Market Entry	
	Product Market Regulation (OECD)	
Effective Price System	Price Control (Fraser Institute)	
	Administrative vs. Market Prices (World Bank)	
	Subsidies and Other Transfers (% of expenses, OECD)	
Competition	Media Pluralism (Sustainable Governance Indicators)	
	Competition Oversight Authority (Global Competition Review)	
	Questionnaire External Sources	
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Table 3 shows the variables which have been chosen as indicators for the principles of *Competitive* and *Efficient Markets* respectively. As with all categories, the figures are partly taken from existing databases such as those of the OECD and the World Bank, and partly generated by an expert panel which was assembled for this project.

¹⁴ For a general overview of econometric methods to measure market power see Baker and Bresnahan (2008).



The category consists of three principles. The first, *Open Markets*, captures the openness of factor markets and includes information on barriers to entering into various professions (e.g. excessive formal requirements), or product markets (e.g. unwarranted bureaucratic requirements). Moreover, we also include a variable on the extent of product market regulation. Since Eucken acknowledged the need for prudential state intervention when markets do not work effectively, (e.g. in the presence of externalities), the measurement of the first principle relies heavily on expert ratings, which determine whether laws and / or regulatory practices deviate from efficient policies. The second principle, *Effective Price System*, comprises three indicators that measure whether prices can adjust freely to reflect scarcity and thus lead to efficient allocations or if they are distorted, e.g. by subsidies or price limits. The last principle, *Competition*, contains information on whether the prerequisites for competition to work for the benefit of consumers are met. These prerequisites entail first, whether consumers have access to a variety of independent information sources and second, whether the competition authorities work effectively and have the necessary level of assertiveness.

All indicators have in common that they do not seek to measure outcomes, but are focused on long-term institutional arrangements. For example, we do not measure the intensity of competition, but ask for institutions like antitrust legislation and the respective authorities in order to prevent monopolies and cartels. Of course, the indicators are neither comprehensive nor an ideal variable in any case, but can only serve as a pars pro toto.

CATEGORY II: EFFICIENT PROPERTY RIGHTS

The second category, *Efficient Property Rights*, is also at the very heart of the concept of a modern social market economy. In particular, they are essential for both efficiency and liberty. The first principle recognizes that secure property rights for both physical and intellectual property are among the most important determinants for economic growth. Traditional ordoliberal thinking focused here on private property, which was not derived from natural rights but mainly established because of the division of power and the positive incentives generated thereby (Peukert, 2000, p.123). In modern economics, a broader scope is chosen, differentiating between various rights and obligations which can be related to private property or any stakeholder character respectively. In particular, externalities and moral hazard should be prevented thereby because they would interfere with both efficient allocation and social freedom. On the other hand, the natural incentives for investment, maintenance, and careful use should not be unduly strangled by excessive, legislation, because this would create both an overbearing bureaucracy and a permanent quarrel about rights and obligations in society. In society of the property of the property of the concept of the concept of the concept of the concept of the property of the concept of t

¹⁵ See e.g. Acemoglu et al. (2005). A very comprehensive introduction into the relationship between knowledge accumulation and growth can be found in Aghion and Howitt (2008).

⁶ In the 1930s, a famous debate took place, mainly between Ludwig von Mises on the one side and Oskar Lange and Abba P. Lerner on the other, concerning the option of competitive socialism. Both theoretical arguments and empirical evidence in the former Yugoslavia finally demonstrated that the combination of decentralized allocation decisions and common property, (with centralized investment and public price control) does not really work.

Table 4: Principles and Indicators of Efficient Property Rights

Principles	Indicators
Property Rights	Investor Protection (World Bank)
	Patent Protection (Park Index of Patent Rights)
	Intellectual Property Rights (World Economic Forum)
Freedom of Contract	Occupational Choice
	Market Transparency and Consumer Protection
	Judicial Review (Sustainable Governance Indicators)
Liability	Private Insolvency
	Ratio Medium-sized Companies to Total Companies
	Manager Liability
	Questionnaire External Sources
	Bertelsmann Stiftun g

Table 4 shows the variables which have been chosen as indicators for the three principles of *Efficient Property Rights* respectively. Again, several indicators are generated by the expert panel, because respective information could not be gathered from existing data bases. In particular, this applies to all indicators of *Liability* and also to the first two indicators for *Freedom of Contract*. Concerning efficient property rights, investor protection is of course not the only relevant aspect, but good indicators, which are both available for all countries and variables with a structural rather than outcome orientation, were hard to find.

In general, the correction of externalities – regardless of whether negative or positive – is necessary to fulfill the first theorem of welfare economics. ¹⁷ Well-known negative externalities are environmental pollution and the free use of limited natural resources, which are covered by our category on sustainability (see below). However, the infringement of property rights is also a case of an externality with growing relevance, in particular concerning patents and other intellectual goods. Positive externalities may arise for example from education and R&D in the form of knowledge spillovers to the rest of the economy, which is frequently taken as an argument for subsidizing these activities.

¹⁷ The classic reference on externalities is Coase (1937). See also Laffont (2008).



Another important element of efficient property rights is legal certainty, which should be independently reviewed by the courts. Without investor protection (including intellectual property rights protection) and the rule of law, even properly defined property rights cannot work because of the lack of enforceability. This also applies in the case of corruption, because the latter implies a violation of existing property rights by definition. Legal certainty is also a precondition for economic confidence, in particular concerning foreign direct investment and savings. The first two indicators assigned to the second principle *Freedom of Contract* focus on whether state provisions constraining contractual choice are prudential, in particular on excessive restrictions to occupational choice and the existence of institutions that prevent consumers from being exploited or misled. Moreover, the second principle contains information on whether governments are monitored by an independent judiciary.

Since efficient allocations require that economic actors participate in the consequences of their decisions, we focus on various dimensions of *Liability* in the third principle. While the first and the third indicators directly relate to the liability of entrepreneurs and managers, we also include information on firm size distribution since the managements of medium-sized enterprises tend to take a higher level of personal responsibility for their firm's success compared to large firms where ownership is often separated from management.

As a striking example for the importance of liability, the recent financial crisis arose not least because the liberalization of financial markets had not been backed by a respective tightening of liability rules, in particular for managers and consultants. Admittedly, it is not at all easy to design a set of rules that balance the need for liability against the willingness to take risk, which is also essential for a market economy. Presumably, the huge investments which are needed in a modern industrial economy would never have been made by small and medium enterprises without the limitation of liability. On the other hand, many misguided investments and spectacular crashes could also have been avoided with stricter liability rules. Modern economics has expounded a broad range of literature on this issue, both within the field of (game)-theory and in terms of the collection of empirical evidence. Among others, this research has resulted in both practical rules for good governance and the design of principal-agent relations. From a modern economic point of view, the question is no longer if, but under which conditions to allow for decision-making by people who do not directly bear the respective risks and costs. One should note that this problem is at least as much of an issue in the public sector as it is in private firms.

¹⁸ A very comprehensive overview of principal-agent problems within firms is provided by Prendergast (1999).

CATEGORY III: ECONOMIC AND ECOLOGICAL SUSTAINABILITY

The third category focuses on sustainability in the financial, political and ecological spheres.

Table 5: Principles and Indicators of Economic and Ecological Sustainability

Principles	Indicators
Financial Stability	Central Bank Independence
	Depth of Credit Information Index (World Bank)
	Public and Private Credit Registry Coverage (World Bank)
	Prevention of Too-Big-to-Fail
	Bank Capital to Assets Ratio (World Bank)
	Equity Ratio of Companies
Consistency of Economic Policy	Control of Financial Consolidation (OECD)
	Extent of Staff Training (World Economic Forum)
	Pension Systems Linked with Life Expectancy (OECD)
	Social Security Spending (OECD)
	R & D Spending (OECD)
Efficient Enviromental Protection	Market Economy Instruments
	Environmental Policy (Sustainable Governance Indicators)
	Revenue from Green Taxes (OECD)
	Questionnaire External Sources
•	Bertelsmann Stiftung

The first principle, *Financial Stability*, requires a central bank that aims to keep inflation rates low without being dependent on the government or under political pressure. Second, we included variables measuring the availability of information about a debtor's solvency and repayment history, which is important to mitigate inefficiencies resulting from asymmetric information in credit markets. Furthermore, the first principle contains information on the prevalence of stability enhancing structures in the financial sector and the economy as a whole. In particular, we consider whether the financial sector is dominated by institutions which are "too big to fail" and, as an important indicator of an economy's vulnerability to financial turmoil, banks' capital to asset ratios and the equity ratio of firms.



The second principle, Consistency of Policy, measures whether a country can meet its long run financing needs. The variables Control of Financial Consolidation and Pension System Linked with Life Expectancy account for institutional provisions that prevent excessive state expenditures. The indicator Social Security Spending in turn provides information about a sizable part of government expenditure. Lastly, the indicators Extent of Staff Training and R&D Spending proxy for investment in human and physical capital which is an important determinant of a country's long run growth and thus, to its capacity to raise revenue.²⁰

Continuity and reliability of economic policy is a precondition for confidence of both investors and foreign trading partners. Without confidence, there will be less investment, less gains from trade and hence, less welfare and growth than would be possible otherwise. To a certain degree, there is an overlap with our Efficient Property Rights category, because the correction of externalities is a key element there as well and investor protection can also be seen as a core element of economic reliability. However, the latter would imply much more. First and foremost, consistency of policy should give consumers and investors a sound and reliable basis for their decisions, including sound public finances and proper provisions for the challenges of demographic change. This is not easy to achieve, because it is often in a government's interest to change incentives ex post facto when benefits have already been reaped. The costs, in terms of loss of reputation and confidence, can then be rolled over to future generations of politicians. Finally the problems of time-inconsistent policies like this are the result of an intergenerational externality that can only be overcome by long-term rules or meta-rules, which a simple majority cannot easily alter.

The last principle of Efficient Economic Protection comprises three variables devoted to ecological sustainability. In particular, we focus on the existence of well-designed policy instruments that aim to internalize external effects related to the environment and balance ecological and economic concerns. While in politics the common answer to these problems is civil and regulatory law, economists generally prefer market instruments in order to internalize the externalities. The reason is that the optimal level of consumption of resources is generally above zero, but depends on the opportunity costs of prevention or substitution respectively. However, these opportunity costs cannot be known by any political institution but could be better detected by market mechanisms.²¹ Thus the natural solution would be installing appropriate instruments like CO₂ emission certificates or green taxes in order to make market players take into account the true costs of their decisions.²²

²⁰See e.g. the extensive discussion of (endogenous) growth models in Acemoglu (2009).

²¹ This problem is discussed in the basic paper of Baumol and Oates (1971).

²² Endres and Finus (2002) illustrate in their paper, that quotas may be superior to tax agreements.

Although well-founded in the theory of welfare, market instruments in environmental policy are often opposed in politics. The reasons include both the difficulty of measuring, in particular, potential and future long-term externality costs as well as distributive arguments, as the internalization of external costs would imply higher prices for the respective goods. As a result, direct interventions like prohibitions and regulations are in reality frequently preferred over market instruments. The criticism of this tendency is threefold: First, it is a threat to individual freedom. Second, this policy can be regarded as unfair because it tends to discriminate between activities which involve the same amount of externalities. Third, market instruments, along with direct distributional measures, could achieve the same degree of environmental protection at lower opportunity costs and voluntary degrees of redistribution.

Another key element of economic sustainability is financial stability. Traditionally, this issue is mainly related to an independent central bank and the preservation of stable money (Berger et al 2001, Botzenhardt, 2001; Cukierman, 2008). However, as the financial crisis has revealed, there is much more to pay attention to (de Haan, 2008; Mishkin, 2008). For example, an unregulated banking sector can be a severe danger for the economy as a whole, as was already recognized by Adam Smith. Moreover, it seems natural that a relatively high level of equity of both industrial and financial firms is more sustainable with respect to financial stability than excessive debt.

All of the indicators selected to measure *Economic and Ecological Sustainability* seek to mirror institutional provisions for the realization of the respective principles rather than mere outcomes. For example, concerning environmental protection, we do not investigate the quality of the environment reached but the instruments that are chosen in order to preserve it. As with many other principles, the indicators were partly generated by the expert panel. Concerning this category, this applies to three indicators for *Financial Stability* (namely Central Bank Independence, Prevention of Too-Big-to-Fail and Equity Ratio of Companies), and also for Market Economy Instruments in the principle *Efficient Environmental Protection*.



CATEGORY IV: SOCIAL INCLUSION

The final category, *Social Inclusion*, measures to what extent countries conform to the social objectives posited in our concept of a modern social market economy. The first principle, *Social Mobility*, captures to which degree the tax and social insurance system redistributes to those in need while still maintaining incentives to work. Moreover, we include two indicators related to the permeability of the education system²³ and the legal framework against discriminatory practices to provide equal opportunities for success within a society. The second principle, *Effective Labor Markets*, contains several variables that assess the effectiveness of labor market institutions and interventions that aim to balance the interests of employers and employees and provide additional qualifications to the unemployed.

Table 6: Principles and Indicators of Social Inclusion

Principles	Indicators
Effective Labor Markets	Active Labor Market Policy per Umemployed (OECD)
	Employment Protection Legislation (OECD)
	Prevention of Duality
	Employer-Employee Parity
	Effective Labor Market Programs
Social Mobility	Social Inclusion (Sustainable Governance Indicators)
	Non-Discrimination (Sustainable Governance Indicators)
	Public Spending on Childcare and Early Education (OECD)
	Education Structures
	Compulsory Unemployment Insurance (OECD)
	Guaranteed Minimum Social Security
	Income Taxation and Incentives to Work
	Questionnaire External Sources
	BertelsmannStiftung

In Table 6 the respective variables for the two principles of *Social Inclusion* are shown. Concerning this category, we had to rely relatively strongly on the expert panel, because social institutions are particularly hard to measure by merely exploiting existing data. Therefore, the indicators Guaranteed Minimum Social Security, Income Tax and Incentives to Work and also Education Structures within the principle of Social Mobility stem from the panel. The same applies to all indicators of effective labor markets with the exception of the first two indicators.

²³Since early interventions are known to be necessary for the educational success of children from disadvantaged backgrounds, we consider the variable "Public Spending on Childcare and Early Education" to be closely related to social mobility.

Among all the aspects of a social market economy, the social issue is, one can presume, the one which has changed the most since the days of Eucken. Being more or less a concession to hardships at the time, social inclusion and participation are now defined much more broadly, including cultural participation and substantial legal entitlements, instead of mere existential relief. In a way, this tendency is self-enforcing, because the more people gain a substantial part of their income from non-market sources, the stronger their potential as a pressure group becomes. This may be one reason why Erhard's prediction that the importance of the social question would decline with increasing wealth turned out to be false. Another reason is the fact that security in general and social security in particular have turned out to be superior goods, becoming more and more relevant with increasing welfare, because there is simply more to lose.

Moreover, it is also true that pure alleviation of economic hardships proves insufficient for reducing inequality and achieving equal opportunities in society. From a liberal point of view, *Social Mobility* is the key element of a just society, leaving room for unequal results but not for unequal chances. In particular, social mobility requires that all children have a fair chance to develop their abilities (Almond and Currie, 2011), independently from the social status and ethnic background of their family. Although the early ordoliberals did not particularly stress this point, they would undoubtedly agree to it today, not least because better education generally goes hand in hand with positive externalities in favor of more growth and higher welfare for the economy as a whole.²⁴

A much trickier point is the level of inequality which a modern society is willing to tolerate (Krueger, 2004). Neither economic theory nor empirical research can provide a clear recommendation on this issue. From an institutional point of view, the more crucial question concerns the appropriate instruments for distributional goals. Economists generally prefer indirect measures, in particular those that improve the ability of recipients to improve their own situation and overcome the necessity of relying on the state for subsistence. Apart from education, important examples are policies that incentivize work among welfare recipients, such as the EITC in the US, the German "Kombilohn" or other workfare measures instead of unconditional benefits.

Concerning *Effective Labor Markets*, no simple formula exists. In principle, ordoliberal economists are skeptical about wage cartels and all the more about legally binding minimum wages, because in both cases the competitive equilibrium wage is suspended. On the other hand, even Eucken recognized the possibility of exceptions to this rule, for instance if an anomalous labor supply would result in an unstable equilibrium or unacceptably low wages from a social point of view.

 $^{^{24}\}mbox{See}$ Lange and Topel (2006) and the literature cited therein.

²⁵ Also Eucken explicitly mentioned self-help and the subsidiary principle as complements to his main principles (Grossekettler, 2010, p.324).



In modern labor market analysis, many more reasons are discussed for market interventions, including monopsonistic labor demand, discrimination, informational asymmetries and efficiency wages. There is also a widespread political consensus that unions should be allowed to monopolize wage bargaining on the labor supply side, and that strikes ought to be allowed to enforce their claims. Moreover, workers via union representatives participate to a great extent in both economic and political decisions in many countries, up to co-determination on equal terms, as for example on German supervisory boards. Even with the considerable economic costs that such regulations entail in terms of limited liability and bureaucracy, they may well contribute to social peace.

Again, the concept of a modern social market economy calls for a balanced institutional design. For example, given union privileges, it is important that a countervailing power exists on the labor demand side and that a certain bargaining culture ensures fair and amicably achieved agreements. Concerning labor market policy, the activation of the unemployed is certainly preferable to purely passive measures like early retirement or generous benefits. Analogously, labor protection legislation should be fair and give no incentives for abuse or saturation.

Country Selection

Our analysis covers eight countries; Canada, France, Germany, the Netherlands, Spain, Sweden, the United States and the United Kingdom. We chose these countries in order to introduce enough variance to test our concept. Many of these countries consider themselves social market economies and others do not. We hypothesized that we would find significant variance between these countries. Among those that display characteristics of a social market economy, we also expected to find variance, albeit to a lesser extent.

CONCLUSION

A common feature of the principles discussed above is their institutional character. They thus mirror the strong emphasis which is laid on general rules in a modern social market economy, both for the markets and for the public sector. The ultimate reason for this preference can also be interpreted in terms of game theory: Without binding rules, time-inconsistent decisions and lack of reliability would lead to myopic behavior, which in turn would damage both efficiency and welfare in the long run.

A second common feature of the principles is the priority of a self-regulating system over direct public intervention. The idea that the latter is generally less efficient and, even more importantly, more prone to the emergence and misuse of power, is strongly supported by modern institutional economics, including theories of bureaucracy and models from the area of political economy.²⁶ In

²⁶ For an economic perspective on bureaucracy, see Dixit (2002).

a way, every political market intervention converts private into public goods, to a certain degree at least. This not only weakens market incentives, but is also likely to result in political quarrels where, in the end, the maximization of votes will prevail over the maximization of common welfare. In particular, minorities suffer the risk of being completely ignored or even exploited, while in the market process they can pursue their interests in the same way as everyone else, within the limits of their endowment at least. In this way, a political element innately exists in the concept of a social market economy, which ultimately cannot be separated from economic reasoning.

A third important point, which was already stressed by Eucken, is the mutual interdependence of the principles of a social market economy. They must be seen as a whole, and cannot be broken up in order to select only those elements which seem convenient. For example, there is a unity of decision-making power and liability, and also competition would hardly work without an efficient pricing system and open markets. Moreover, the market mechanism cannot work properly in order to reduce unemployment if wages are fixed at too high levels or if welfare policy weakens the incentives of the unemployed to find a new job. Analogously, competition between firms fails to guarantee efficiency if, within the decision-making bodies of firms, authority and liability are separated. Last but not least, a free society requires both a certain degree of economic liberalism and a certain degree of social inclusion. Not only would welfare and acceptance otherwise suffer severely, but social mobility as a fostering factor of social inclusion actually reinforces economic performance in the long run. Eucken himself called this the "interdependency of constitution." Recent history, namely the demise of the communist economies, proved him right.

²⁷See also Oswalt-Eucken (1994).



INDEX RESULTS - INITIAL FINDINGS

Cortnie Shupe, Christina Busch

EXECUTIVE SUMMARY

The goal of this explorative study was to create a measurable concept for the institutions of a modern social market economy (MSME) through a heuristic process. As part of this process, it tested a sample group of 8 economies to determine to what degree they institutionally resemble MSMEs.

According to ordoliberal thought, a MSME exists if and only if all of the 11 institutional principles are upheld. The key findings of this explorative study, including an evaluation of: Canada, France, Germany, the Netherlands, Spain, Sweden, the United Kingdom and the United States, offer insights into the institutional strengths and weaknesses each country exhibits in the 11 principles of a MSME. Measurable indicators for each principle make this analysis concrete and translatable into policy measures commensurate with a MSME. Of course, only some of the countries surveyed have expressed the goal of being a social market economy. Others, such as the United Kingdom and United States were included in order to ensure variance for the purpose of testing our concept of a MSME.

Sweden leads the ranking, showing consistently strong institutions in all 11 principles of a MSME. Spain, on the other hand, consistently scored low, often as a consequence of weak institutions and mechanisms for enforcement rather than lack of formal rules and procedures. As such, its institutions fall short of representing a MSME. Due to the importance of the interdependence of the principles, even Germany, which ranks second, shows a need for improvement in some institutional areas before it can fully be considered a MSME. Most countries demonstrated a great deal of variance across principles, which suggests that in order to truly reflect modern social market economies, institutional reform would be required in those areas in which scores are low. Institutional clusters could be seen between Canada, the UK and the US. Perhaps more interesting, however, is the finding that little clustering occurred around the countries of the Economic and Monetary Union (EMU).

OPEN MARKETS

The institutions guaranteeing open markets appear relatively strong in all countries, evidenced by above average scores across the board for this principle. However, significant differences between the highest-scoring country, Sweden, and the lowest-scoring country, France, can be observed. Sweden has very open labor, capital and product markets while France protects its domestic markets to a higher degree than other countries. It is the only country in our sample with higher product market regulations than the OECD average and it controls capital movement more often

than most of the other countries in the group by protecting "strategic industries" from foreign ownership. The US has similar restrictions in the defense and energy industries.

Less important in Eucken's time than today in a globalized world, open labor markets in the form of freedom of migration prove essential for a MSME. Germany stands out in this regard as one of the few countries that have failed to design a modern immigration law centered around its economic self interest and provides few provisions to foster the immigration of skilled workers. Sweden, on the other hand, targets high-skill labor immigration with differentiated policies.

EFFECTIVE PRICE SYSTEM

In this central principle of a MSME, very different levels of price controls, administrative prices and subsidies can be seen, *inter alia*, among the countries of the EMU. Because all of the countries in the sample employ some type of price controls, none of the economies scored particularly well for their institutions in this area. France performs well overall, but together with Spain, it shares the last place in respect to price controls, which were assessed as being the highest in the 8 countries. France boosted its overall score for an effective price system by subsidizing and transferring much less than Germany, the Netherlands and Spain. Many of the economies received a relatively low score for one of the indicators. However, Spain consistently scored low for all three indicators that measure this principle. Considering all three areas, the UK's institutions perform the highest.

COMPETITION

Germany, the United States and the United Kingdom received very positive evaluations for their institutions regarding competition. A strong competition oversight authority serves as a pivotal institution for fostering competition within an economy. The United Kingdom and United States received the highest possible assessment for their respective competition oversight authority and France and Germany scored high as well. Germany's laws and rules for competitive structures in the media stand out as fostering structural diversity, which ensures public access to a variety of substantive debate and information. A lack of laws in France and the UK, in contrast, that would ensure competitive structures, has led to oligopolistic ownership in printed press and television, which to some extent limit access to the objective information required for functioning competition.

PROPERTY RIGHTS

Canada, the United States and the United Kingdom share very strong investor protection rights. The degree of investor protection in the countries sampled varies greatly, with a low-scoring cluster around the countries of the EMU for their minority shareholder protections, evaluated as weak. Institutions taken into account on this score include securities regulations, company laws, civil procedure codes and court rules regarding evidence. With respect to patent protection, all of the 8 countries received high scores.



FREEDOM OF CONTRACT

Sweden's institutions in the area of occupational choice, market transparency and consumer protection and judicial review receive the maximum possible assessment. Although still receiving a relatively high score, Germany was marked down for its barriers to occupational choice associated with its *Handwerksordnung*. Often criticized in the context of EU integration, these handicrafts regulations can be viewed as protective measures for insiders, as they prohibit new businesses from setting up in small trades. In terms of consumer protection, most countries protect consumers by a host of legal provisions against misleading marketing and price intransparencies. While formal institutions exist in the US and Spain, the US report highlights problems of enforcement due to lack of financing and staff. The evaluation for Spain, on the other hand, describes an overabundance of organizations and some misuse of power.

LIABILITY

Debt servicing periods and mechanisms for debt collection both affect the borrowing behavior of individuals in terms of risk-taking. Uncoordinated private insolvency rules among EU countries can have unwanted consequences. Shorter debt-servicing periods in Great Britain, for example, induced many insolvent German residents to move there in order to avoid the stricter German insolvency law. In Spain, a lack of debt collection mechanisms may have had adverse effects on the construction boom, as mortgages became the only sure way to enforce debt collection.

Medium-sized enterprises often link management closely to ownership, which tends to go hand in hand with liability. Germany received the highest marks for its long tradition of promoting a strong Mittelstand through various mutually reinforcing institutions. Slow SME development despite French policies in this area demonstrates the necessity of a long-term horizon and consistency of policy to successfully implement new institutions. Spain received one of its highest scores in this area, owed to its rather successful decentralization of policies to promote SME.

In a more direct measurement of manager liability, Swedish law has an array of provisions that earned the country the highest ranking for institutions that encourage responsible management, holding individuals accountable for their actions. Across the EU, incentives to promote long-term rather than short-term profit orientation varied greatly. The US stood out as an economy that focuses on short-term profit orientation, has the least amount of manager liability and reinforces this orientation through institutions in other areas related to manager liability.

FINANCIAL STABILITY

According to ordoliberal theory, financial stability requires that the central bank focus exclusively on price stability and maintain policy, financial and personal independence. The Bank of Canada and the Riksbanken of Sweden are the only two institutions that fully met these criteria. Although the ECB did fair better than the Bank of England and the Fed, its policies, in particular during the recent crisis, have not differed greatly from those of the Fed: it engaged in quantitative easing and some critics question its political independence after the decision to begin purchasing government bonds in 2010.

Evaluations of the too-big-to fail problem revealed that competitive institutions were unable to prevent this problem. On the contrary, global competition drove many bank sectors to become more concentrated and subsequently to cause instability in the case of insolvency. Moreover, the study found that US banks are by far the most capitalized and equity ratios of companies are not particularly low in any of the countries studied. More research is needed on the speed of and institutional preparedness for compliance with Basel III.

CONSISTENCY OF POLICY

Consistency of Policy requires investment in capital inventories for the future, including human capital. All of the countries received similar ratings for the extent of their staff training. Sweden invests the greatest percent of GDP in research and development, while Spain invests the least. Two important areas of divergence, in particular among the countries of the EMU relate to the control of financial consolidation and linking pension systems with life expectancy. Germany is the only country of the 8 evaluated that has established a debt brake in its constitution. Also, the Netherlands and Spain are the only two countries that have not yet reformed their pension systems to address demographic challenges to sustainable financing.

EFFICIENT ENVIRONMENTAL PROTECTION

None of the countries in the sample obtained an optimal score for market instruments that effectively internalize externalities. Sweden received a good score due to an array of taxes that raise the price of certain goods closer to their actual cost. It also invests revenue from green taxes like the congestion tax to finance improvements in public transportation and infrastructure. While Germany levies an energy tax, it channels revenue to finance the social security system rather than focusing on reinvestment in environmentally-friendly infrastructure. Despite common rules for environmental policy among EU countries, compliance and enforcement differ. Germany and Spain subsidize pollution-intensive industries to a larger extent than others and gas taxes greatly diverge within the same EU framework.



EFFECTIVE LABOR MARKETS

A framework for effective labor markets provides the foundation for active participation in social life, both during working years and retirement. Spain scored very low on this principle. The report describes how the weakness or dysfunction of some institutions, actually reinforce poor performance in other areas. Sweden and the Netherlands score consistently high for their institutions fostering an effective labor market. Germany's active labor market policies (ALMPs) achieve the best rating for its success in activating the long-term unemployed and making financing decisions based on cost-effectiveness analysis. However, despite Germany's current economic performance, a structural analysis reveals weaknesses in the form of asymmetries that foster a dual labor market. Again within this principle, significant variance exists among EMU countries in particular in regard to employment protection and ALMPs.

SOCIAL MOBILITY

Less prevailing in Eucken's time, societal expectations for social mobility today shape current debates about social justice. Sweden obtained the highest overall score because of its institutional infrastructure and policy focus on enabling mobility through equal opportunities rather than merely offering financial compensation for social exclusion. Sweden furthermore surpasses the other countries examined in promoting regional equality in the education system. While Germany scores high on most indicators for social mobility, it lost points for its lack of investment in international comparison in childcare and early childhood education as well as relatively non-permeable education structures. Likewise, France and the UK lost points for the social selectivity of their education systems. Similar to Germany and the UK, the US struggles with regional disparities and lacks policies to encourage equal opportunities of low-income areas. Spain's higher education system serves as a counter example to Germany, France and the UK: entrance into university has so few barriers than the value of university education in Spain is eroding.

Figure 4: Compound Index Results

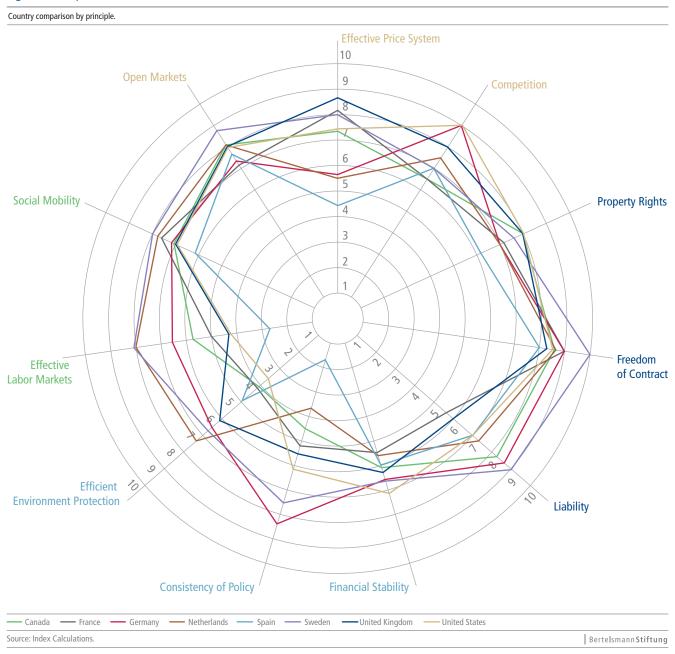
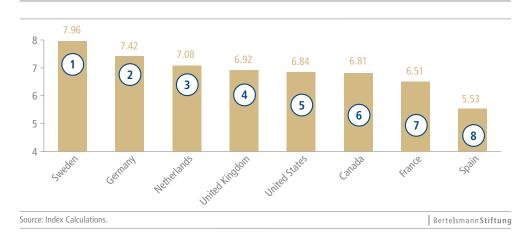




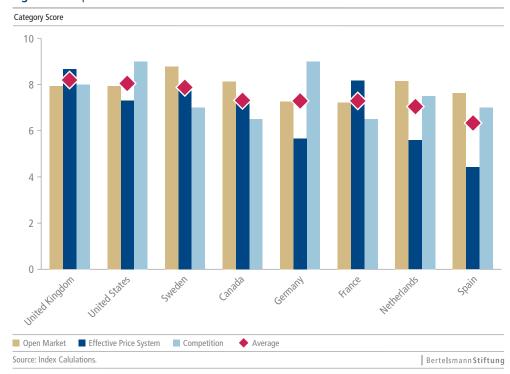
Figure 5: Ranking: Compound Index Results



CATEGORY I: COMPETITIVE AND EFFICIENT MARKETS

Aggregated scores for the principles of Open Markets, Effective Price System and Competition comprise the composite score for the category of Competitive and Efficient Market Allocation.

Figure 6: Competitive and Efficient Markets



OPEN MARKETS

Open product, labor and financial markets are all subsumed under the principle of open markets. While differences do exist, the average rating for this principle reflects rather open markets in all of these areas.

In areas which the OECD deems competition viable, it rates member countries on the extent to which policies promote competition. With a scale from 0-6, from least restrictive to most restrictive, France, Germany and Sweden regulate product markets in more areas and to a higher degree than the other countries evaluated, but still overall do not show high degrees of regulation. With the exception of France, all countries in the sample rank below, i.e. are less restrictive than the OECD average.

Figure 7: Product Market Regulation

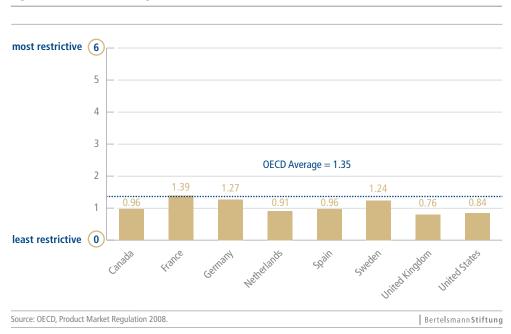
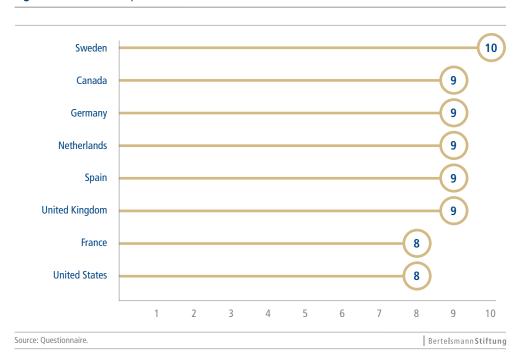




Figure 8: Controls on Capital Movement



Controls on Capital Movement

Free movement of capital is one of the four fundamental freedoms of European integration. EU laws rather than national legislation define controls on capital movement in EU member states. This applies to six countries in the index – France, Germany, The Netherlands, Spain, Sweden and the United Kingdom. The only exemption to the EU's exclusive competence on foreign direct investment (FDI) are provisions regarding the supervision of national tax laws.

By and large, the EU regime of capital controls for members of the Economic and Monetary Union is liberal. Exemptions are well-defined and aim at stabilizing the union. They relate to economic sanctions, prudential measures, taxation or security. Article 75 of the Treaty on the Functioning of the European Union for instance provides measures to combat terrorism, e.g. by freezing funds and financial assets. Euro zone non-members may introduce controls if a crisis occurs or if balance of payments imbalances jeopardize the internal market.

Capital flows in and out of France are generally free, but French legislation provides for a comparatively high number of restrictions to foreign investment on the grounds of shielding French companies from foreign takeovers. A 2005 law forces any foreign buyer of a French listed company to also acquire all of its subsidiaries, thus restricting takeovers of conglomerates such as Renault. Moreover, eleven industry sectors are listed as "strategic", mandating government permission for any takeover.

Spain is an example of an EU country that makes comparatively little use of the possibilities to curb foreign investment for strategic or security reasons, as evidenced by the uncontested sale of Endesa, the country's largest electric utility company, to Italy's Enel in 2007.

The Netherlands owe their liberal attitude toward cross-border financial flows to their long tradition of investment abroad. Taxes on capital are scarce and designed so as to not deter foreign capital. The Netherlands are home to several multinational corporations' headquarters, owing in part to the high number of double tax treaties that the Netherlands have entered into with other countries. Numerous tax deductions render the effective corporate tax rate below the official 25.5 percent and are as low as 1 percent on the Dutch Antilles.

The US has historically had fewer capital controls than Western European countries and further liberalized capital movement after the collapse of the Bretton Woods system. Outward FDI grew ninefold between 1982 and 2006. Inward FDI faces more restrictions, mostly on investment in defence, transportation, energy and banking. These regulations aim to preserve US security or strategic interests, yet they jeopardize some US sectors by politicizing foreign investments. Two recent clashes of foreign investment with national security concerns stand out: Dubai Ports World's effort to take over operations of six US ports in 2006 and China National Offshore Oil Company's attempted purchase of the oil firm Unocal in 2005. Both potential buyers bowed out after severe bi-partisan Congressional pressure.

Freedom of Migration

For both economic and humanitarian reasons, migration should be as free as possible within the limits of host countries' security. Migration can significantly accelerate recovery after economic shocks, when laid off workers are free to migrate to other countries where their skills and knowledge are in demand. For host countries, labor migrants help fill gaps in the national workforce. In the long run, migration can serve as a signal and enabler for structural industrial change.



Figure 9: Net Migration

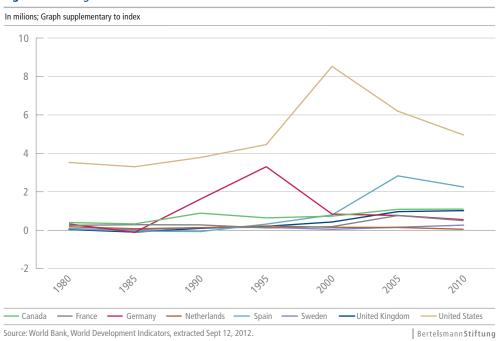


Figure 10: Freedom of Migration



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One indication that freedom of migration in the US is hampered is the fact that demand for work permits vastly outstrips supply. The number of H1-B visa – the main work visa for those seeking temporary residence – is capped at an annual 65,000, while the number of Green Cards (for permanent residence) is capped at 140,000 per year. Visa application fees are high and keep newly established companies from hiring foreigners, thereby limiting their ability to hire the most qualified applicants at competitive wages. Immigration for low-skilled workers is even harder and regularly takes more than seven years to process. Integration programs for newly arrived workers are administered on the state rather than on the federal level and vary widely. Overall, the US ranks fairly high among similar nations regarding the integration of foreign workers.

Freedom of migration in neighbouring Canada is higher than in the US, as evidenced by one of the largest foreign-born population shares worldwide. The number of immigrants stands at roughly 250,000 per year. Canada's immigration policy is based on a transparent point system that favors workers with skills deemed necessary by the Canadian government. While the point system is designed to ensure that immigrants quickly integrate into the country's economy, immigrants exhibit higher unemployment rates and lower wages than native workers because of a lack of recognition of foreign credentials and professional experience. The government has thus introduced new credential recognition programs and simplified immigration for workers trained in trades that are in high demand in Canada.

France, Germany, the Netherlands, Spain, Sweden and the UK all boast an extremely liberal regime for migrants from EU member states. EU citizens are free to live, work, study and retire in any EU member state. Yet compared with the US and Canada, the rules are much more restrictive regarding migrants from non-EU countries. The share of people residing within the EU who were born outside of the union currently stands at 6.8 percent, while the share of people residing in an EU member state who were born in another member state is only 3.2 percent.

In Germany, few provisions exist that foster the immigration of skilled workers, and the country is one of the few without a modern immigration law centred around its economic self-interest. A much anticipated scheme to attract highly-qualified migrants has not shown the desired effect owing to its high minimum income requirement. Even lower than migration rates are Germany's naturalization numbers. The country's nationality law is grounded in Ius Sanguinis, attributing citizenship by descent rather than birthplace. This contrasts for example with the United States, where citizenship is granted on the grounds of Ius Soli. Moreover, Germany is one of the countries with the strictest laws on dual citizenship.

The Netherlands have traditionally been open towards migrants. Post-war immigration waves brought migrants from Indonesia, Turkey, Morocco and elsewhere. Nowadays most immigrants come from Africa, the Middle East and from Eastern Europe, as the Netherlands have been less restrictive towards the new EU member countries than others. Yet at the same time the Netherlands is the only EU member opposed to Romania and Bulgaria joining the Schengen accord on visa-free work and travel across the union.



French regulation regarding migration from non-EU countries tries to limit and steer it so that labor demands of French firms are met. Bilateral migration agreements exist with Senegal, Tunisia, Benin and a few other countries. In the past years, French regulation of labor immigration has been restrictive in response to public fears of wage dumping and hostile attitudes towards immigration, particularly of Roma. The new government under President Hollande is expected to relax these rules.

Britain has seen vast inflows of migrants since the end of the Second World War. The unemployment rate among them is higher on average than for the British population, and incomes are lower. The government in reaction tightened immigration laws and firmly controls immigration of non-EU citizens. Yet there are also versatile integration measures aimed for instance at promoting multicultural education in public schools.

Immigration from non-EU countries into Spain is restricted, but enforcement has been soft during the past decade of economic growth. Even illegal immigrants were granted access to welfare programs. The main occupations for migrants into Spain are home care for the elderly and other low-paid jobs in the services, agriculture and construction industry. While migration policy was mostly lenient, employment regulations were strict. This led to a boom in illegal employment and precarious work conditions for migrants. The burst of the housing bubble in 2007/2008 hit migrants hard, as large shares worked in construction and real estate. The government incentivized their return home, e.g. by paying for travel. Migration into Spain fell precipitously after 2008, and many low-skilled migrant workers left.

The Swedish government agency responsible for migration policy protects the right to asylum and promotes need-based labor immigration. Immigrant participation in the labor market is low. Municipalities must help immigrants enter the labor market, but unemployment among low-skilled immigrants is still rampant.

Barriers to Market Access

Market access, i.e. the removal of trade barriers, ensures that competition between firms can take place on a level playing field. Among the most detrimental and widespread barriers to market access are high costs to starting and operating a business, minimum capital requirements, quotas and licenses for certain industries and other governmental competition-distorting measures that artificially raise prices. State monopolies on public utilities are another example, though a complete liberalization of such network-based industries can prove equally harmful if no regulation is in place to curb inherent monopolistic traits.



Figure 11: Barriers to Market Access

Canada has consistently ranked at or near the top in terms of ease of business operations in the World Bank's *Doing Business Report*. There are relatively few barriers to starting and operating a business, with the most important barrier being agricultural marketing boards that regulate access to production quotas. One ethnic group facing significant barriers to market access are Canadian First Nations people as they often do not own their lands, complicating any transaction involving reserve land.

Barriers to market entry in the US are almost as low as in Canada, with the World Bank's *Doing Business Report* ranking the US 4th in the world for doing business in general, and 8th for the ease of starting a new business. Regulatory requirements for the formation of new businesses are few, especially for small businesses. The *Small Business Administration* supports them through microlending, educational programs and a mandate that they receive at least 23 percent of all government contracts.

Raising capital is easier for most firms in the US than in other countries. This includes small start-up firms that in many countries face capital shortages. Labor standards are low enough to not keep small businesses from thriving. The Sarbanes-Oxley act of 2002, aimed at preventing corporate scandals, has increased the cost of firms to go public. A new bill was proposed to modify the act, simplifying raising capital for small firms through "crowd-funding".



The German post-war economic order places much emphasis on the freedom to set up a business. The German antitrust agency is powerful and does not shy away from fighting oligopolies and cartels. Pressure from the EU's liberalization initiatives has further dismantled market entry barriers, for instance in telecommunications and insurance. Nevertheless, some sectors are still marked by oligopolistic structures, for instance in the energy market, postal services and bus transport – all of them network-based industries. Starting a business in Germany is not easy. The World Bank's *Doing Business Report* ranks Germany at position 98 out of 183, close to Mongolia and Ethiopia. The average time required for starting a business is too long, regulatory procedures are cumbersome and capital requirements are high.

Like most other countries, Sweden has deregulated telecommunications and postal services during the past decades, coincidental with EU membership. In addition, it has liberalized the pharmacy market and the school sector. Alcohol vending policy is still strict, with a government-regulated firm the only one allowed to sell alcohol. Formal barriers to doing business in Sweden are comparably low, with the World Bank ranking the country as 14th out of 183 countries, yet the country only ranks 46th in the sub-category of starting a business.

In the Netherlands, hardly any monopolies exist anymore, with many former state monopolies on utilities, transport and other services dismantled during the past decade. Most business licensing requirements have been abolished, including for handicraft and retail sectors that are still heavily regulated in Germany, Austria and Switzerland. Founding a business in the Netherlands is cheap (about 40 Euros for a single-person business, around 840 Euros for an LLC with more than 250 employees) and comparably easy.

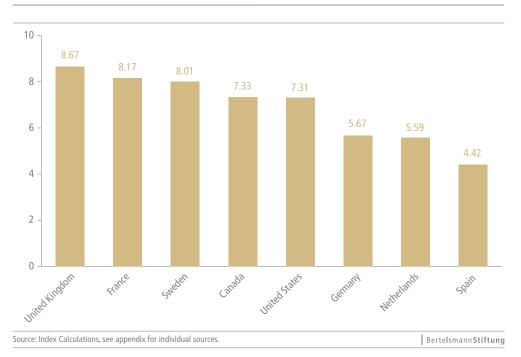
In Spain, telecom and energy companies that were privatized in the 1990s still enjoy substantial market power, even when accounting for their inherent inclination to market concentration given the network effects in these sectors. Industries such as retailing and gasoline distribution feature entry barriers through licenses and organizational constraints such as opening hours. Recognition of foreign qualifications is cumbersome, especially for positions in the engineering and health sector. High taxes and poor access to credit for small firms add further barriers and have been exacerbated by the financial crisis.

In Britain, the deregulation initiatives of the 1980s transferred ownership of public utilities and other services to the private sector, with the goal of increasing efficiency and improving service. Yet in some sectors, such as in the railways, the cost to taxpayers actually rose instead of fell. Numerous agencies nowadays regulate these previously state-run services, with the aim of avoiding the re-emergence of monopolies, e.g. through product standards.

EFFECTIVE PRICE SYSTEM

The Fraser Institute assessed the price controls in France and Spain as the highest among the countries within our sample. None of the countries scored remarkably well on this indicator, given that they all employ some type of price controls. When it comes to the ratio of administrative prices to market prices, however, France receives the highest score. Spain consistently scores the lowest of the 8 countries on this indicator as well.





Subsidies and other transfer payments made to companies as well as private and public enterprises and individuals also distort prices. Germany and Spain subsidize and transfer the most, which negatively affects their respective scores for an effective price system. However, Germany's low level of price controls and high ratio of market to administrative prices boosts its overall assessment within this principle while Spain scores consistently low.

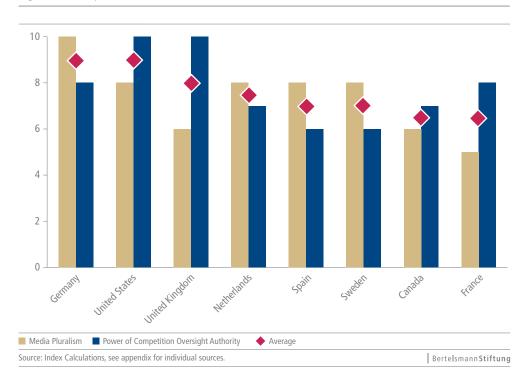


COMPETITION

Two institutions that foster competition include a strong competition oversight authority and media pluralism. The global competitive report analyses and evaluates over 100 competition authorities. This international journal of competition and oversight authority takes into account the size and structure of the institution as well as the employee structure, existence of sector-specialists and the number of economists within the staff.

The United Kingdom and United States receive the maximum assessment for their respective competition oversight authorities. Spain and Sweden score the lowest out of our country sample.

Figure 13: Competition



Scores for the structure of media ownership stem from the Sustainable Governance Indicators. Country experts appraise the extent to which ownership structures ensure a pluralism of opinion and avoid monopoly of information. Germany received the maximum score on this indicator. Both its Interstate Treaty on Broadcasting and Telemedia (*Rundfunkstaatsvertrag*, RfStV) and strong federal cartel office foster a very diverse media landscape, with high quality public and private, local and national stations for television and radio. This structural diversity and competition of opinion ensures public access to a diversity of substantive debate and information for all German consumers and voters.

Out of the 8 countries in our sample, France scored the lowest, a 5 out of a possible 10 for its oligopolistic ownership structure of the print press. While journalists manage to work relatively independently within the given framework, it proves increasingly difficult to do so. The sector's financial fragility, brought on by competition from internet media, the print press relies more and more on funding financially strong industrial groups. These groups own a large number of the media sources in France. The close ties between business and political elites in the country renders this ownership structure problematic for guaranteeing a plurality of informed debate in France.

The UK likewise scored relatively low on the indicator of media pluralism due to a similar level of ownership concentration, with a few corporations controlling the vast majority of large UK newspapers. However, the country's very diverse local media structure is responsible for a score above that for France.

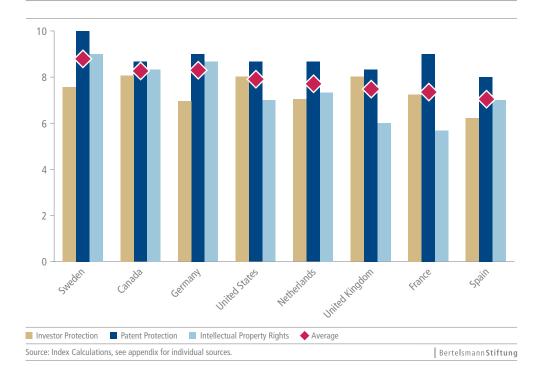
CATEGORY II: EFFICIENT PROPERTY RIGHTS

PROPERTY RIGHTS

Perhaps not surprisingly, Canada, the United States and the United Kingdom share very strong investor protection rights, ranging from 8.3 to 8.0 out of the possible 10 points. These countries also have a long tradition of equity rather than debt financing. This indicator shows a great deal of variance among the 8 countries, with the Netherlands obtaining the lowest score of 4.7, Spain, Germany a 5.0 and France 5.3, the latter group reflecting relatively low scores for strength of minority shareholder protections. Institutions taken into account on this score include securities regulations, company laws, civil procedure codes and court rules regarding evidence.



Figure 14: Property Rights



Patent protection institutions play an important role in safeguarding property rights by considering the positive externalities that ensue through research and development and ensuring that incentive systems encourage this behavior. Country ranks for patent protection strength consider: coverage, membership in international treaties, restrictions on patent rights, enforcement, and duration of protection. Patent protection institutions in the 8 economies examined are strong across the board.

FREEDOM OF CONTRACT

Occupational Choice

Occupational choice is a mainstay of social market economies. People should be free to choose their profession according to their talents and interests. No one should be denied access to a trade or profession on the grounds of his national origin, age, sex or other personal characteristics. A certain degree of regulation and some restrictions on professional practice are justified, but they must be non-discriminatory and grounded in objective criteria such as safety concerns in medical professions.

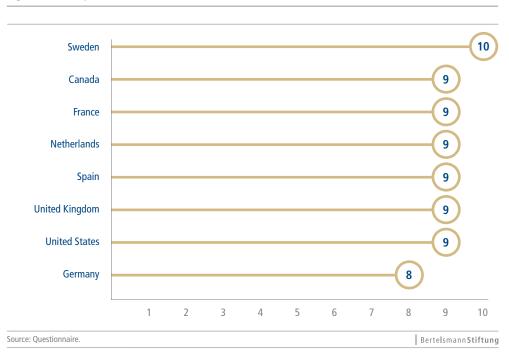


Figure 15: Occupational Choice

Germany is notorious for restricting access to occupations that in most other countries know free entry. Barriers to entry are particularly high in crafts, mechanical art and small trade. The *Handwerksordnung*, or handicrafts regulation, stipulates that a business can only be set up by someone who has several years of relevant work experience, has completed comprehensive training and passed examinations. Health and safety concerns justify some of these regulations, but overall they can be viewed as rent-generating protective measures for insiders. EU integration has and continues to put pressure on Germany's strict market entry rules. Yet it should be noted that strict regulations such as the *Handwerksordnung* have played a crucial role in quality assurance of German trades. They stimulated the rise of the famous German Mittelstand – often highly-specialized SMEs that are market leaders in their niche and that fuelled Germany's enduring post-war export boom.

Sweden makes many efforts to ensure free occupational choice throughout life. Access to education and thus to professional training is near universal. Furthermore, immigrants whose professional credentials from abroad are not recognized in Sweden can attend adult education programs at little or no cost to enable them to enter the labor market.

Regulation of professions in Canada is handled by the provinces. When provinces do not mutually recognize their qualifications, this can cause barriers to interprovincial labor-mobility. French legislation bans any form of discrimination in recruiting, yet in practice, discrimination on the



grounds of age, appearance, handicaps etc. is widespread. A 2006 law aimed to rectify this via the use of anonymous CVs, but it was never implemented. France fares well in terms of lowering discrimination against women, with several schemes in place to help working mothers.

The main obstacle to free occupational choice in the UK is not formal but informal. Structural change in the labor market has significantly increased the demand for the highly-educated and highly-skilled, making it harder for manual and low-skilled workers to find work. Access to most professions in Spain is free, with a few exceptions in the pharmaceutical and legal sphere. In the US, some professions such as in law and medicine are more heavily regulated than in other OECD countries, with training duration for doctors ranging between 11 and 14 years.

Market Transparency and Consumer Protection

Transparency with regard to products, services, prices and availability is necessary for a market to be efficient. Transparent markets ensure competitive prices and high quality as consumers are free to choose where to spend their money. Consumer protection ensures the rights of consumers and the free flow of information, especially in the areas of safety and health. A certain degree of consumer protection is necessary to shield consumers from harm by products whose quality is not readily observable and where information asymmetries exist.





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German consumers are protected by a host of legal provisions against misleading marketing and price intransparencies. Most regulations pertain to consumers' right to information, such as the rule that retailers must indicate gross prices, i.e. include all applicable taxes on the price tag, and must include the base price per unit to simplify price comparison. Regulating authorities such as the Federal Ministry of Consumer Protection are quick to enact new rules when the need arises, leading for example to provisions that callers cannot be charged for the time they spend waiting in customer care phone lines.

The legal system of consumer protection in France is vast and consumer protection NGOs are plentiful. The 1978 *Code de la consommation* sets the framework for defining consumer information rights as well as the rules for the presentation of goods, prices, conditions and terms of delivery. This general law has been supplemented by sector-specific laws, for example mail order and internet commerce, and is buttressed by public administration institutions and a vibrant NGO sector. Different from the fate of companies in the US or Spain, extremely costly lawsuits are rare. Contrary to the principle-based US legal system, France's is rule-based and therefore does not see many class action procedures.

Spain is home to a large number of consumer protection agencies. So many in fact, and armed with such financial and juridical privileges, that there have been a number of incidents in the past that make the numerous market transparency and consumer protection schemes seem questionable and partially counterproductive. Through public subsidies and procedural advantages in court consumer organizations have allegedly been able to bring unfounded liability suits against corporations. Owing to the David-vs.-Goliath image these corporations suffered from reputational damage even if they won the case. In an ironic reversal of purpose the policies that were aimed at benefitting consumers then reduced competition.

Canada serves as Spain's counter-example in terms of the strength of consumer associations, as no public funding is granted to consumer protection agencies, with the exception of Quebec. Legislation varies starkly across the provinces, leading to differing degrees of protection.

Market transparency and consumer protection in the Netherlands are well-provided for in general through public and private regulatory instruments. Product advertising is a case in point – hardly any government regulation is exerted, and judgment on advertising content is outsourced to a private committee made up of producers, sellers, consumers and media representatives. While they do not command public authority, they have a powerful instrument at hand for cases of inappropriate advertising – the media represented in the body will simply refuse to publish the ads in question.

The US has a fairly good system of consumer information, yet understaffing in federal agencies leads to deficiencies, markedly in the financial sector. A sector with a tradition of less oversight than others, it has come to the forefront of public attention after the 2007/08 real estate and then



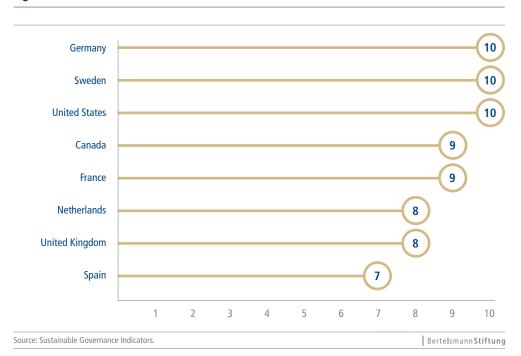
financial crisis, when many private investors claimed they had been misled in their investments by banks and financial consultants. To strengthen consumer protection in financial products such as mortgages, credit cards and derivatives, the Obama administration created the Consumer Financial Protection Bureau in 2009.

Judicial Review

The principle of freedom of contract is reinforced by a prudential legal system and rule of law. Several countries score very high on this indicator, in particular Germany, Sweden, United States, France and Canada for the procedural fairness of their legal system.

The organization of Germany's court system stands out as one that procedural fairness through specialization. Its court system is particularly diversified, allowing for an efficient division of tasks among highly specialized courts. Beyond the Federal Constitutional Court, five supreme federal courts exist: the Court of Justice, the Federal Administrative Court, the Federal Finance Court, the Federal Labor Court, and the Federal Social Court. Basic Law guarantees the judicial independence.

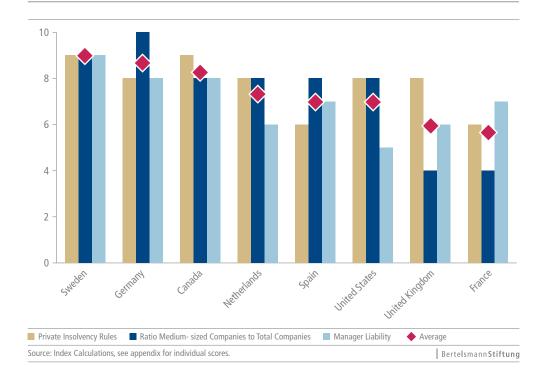
Figure 17: Judical Review



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LIABILITY

Figure 18: Liability



Private Insolvency Rules

Laws that regulate insolvency must strike a balance between two competing objectives. On the one hand, they should deter irresponsible and overly risky behavior. On the other hand, however, they should provide some insurance against the risk of failure that is associated with any investment project. This question assessed the degree of balance in each of the countries.

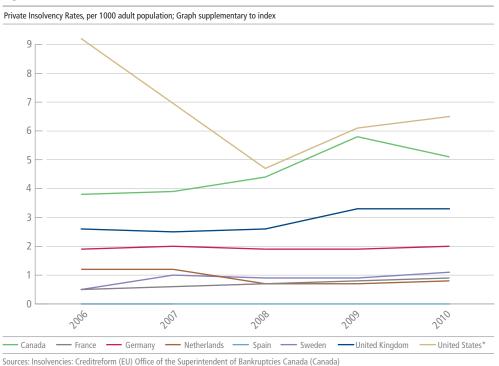
Most countries in the sample received high scores for efficient rules and enforcement of debt collection as well as reasonable debt servicing lengths that promote responsible borrowing behavior. In Sweden, which scored high on this indicator, evaluators described the rules for declaring and evaluating bankruptcy as clear, unbiased and balanced. The 2006 Debt Restructuring Act allows debt restructuring with clear procedures and obligations in reasonable cases. On average, a person who restructures debt due to insolvency is required to live at a subsistence level for 5 years while continuing to service the debt with any income earned above this level. After this period, the debtor is freed from any remaining debt. Debt collection mechanisms work effectively, which reinforces confidence in the rules for taking and giving credit.



A similar system exists in Germany, which has reformed its law several times since 1999. Before this date, an insolvent individual was obligated to live at a subsistence level while servicing his debt, even if this period lasted until the end of his lifetime. The reforms of 1999 changed this period to 7 years. The current law reduced the period to 6 years and a further reduction under certain circumstances to 3 years is planned for 2013. These changes brought German insolvency law more in line with constitutional rights interpreted to include economic opportunity. Moreover, debates preceding these changes also centered around increasing the effectiveness of debt collection. On the one hand, shorter debt servicing periods in other EU countries such as Great Britain – where balance sheets can be cleared between 12 and 18 months – induced many insolvent German residents to move to other countries in order to avoid the stricter German insolvency law. On the other hand, law-makers also expect that a shorter servicing period will increase incentives for insolvent individuals to work and help repay their debt. Whether the debt servicing period becomes reduced to 5 or 3 years depends on several conditions, including how much of the debt he pays off during this period.

The country reports touch on many institutions and mechanisms that affect the way private insolvency rules work. While the length of time after bankruptcy during which a person must continue to service the debt is instructive about the degree to which an economy attempts to balance profit and liability, it constitutes only one aspect of the private liability framework. No optimum

Figure 19: Incidence of Private Insolvencies



American Bankruptcy Institute (USA), *USA 2006 Data from 2005, Population: Eurostat (EU) United States Census Bureau. | Bertelsmann Stiftung

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exists, as each economy will have a different optimum, depending on its rules and enforcement procedures in other areas that impact insolvency rules. Beyond debt servicing periods, institutions for debt collection also matter, as the Spanish case demonstrates.

Spain scored poorly on this indicator due to a systemically lenient framework for insolvency, which reaches from granting loans solely against fingerprint collateral to its debt collection mechanisms. This absence has induced creditors to increasingly demand mortgages as collateral because of the effective institutions in place for real estate, including a land registry and clear, functioning rules for enforcing the collection of mortgage debt. However, even the existing rules in the real estate sector were loosened, as the more lenient banks granted exceptions to low-income borrowers. This distortion that occurred through the lack of alternative, effective means of debt collection might have therefore contributed to the real estate bubble.

While very few cases of household insolvency are reported in Spain, the actual numbers are likely higher, considering the weak mechanisms for enforcement and debt collection.

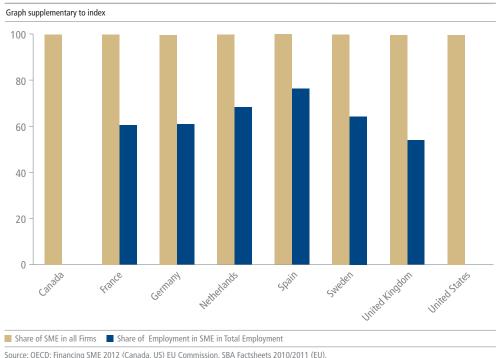
Ratio Medium-sized Companies to Total Companies

Medium-sized firms are believed to be more flexible and innovative with management often being personally responsible for firm success leading to responsible decision-making. However, medium sized firms often lack the financial means to expand into foreign markets and to be internationally competitive. Thus, given national and industry characteristics, there has to be a balance between small and medium-sized companies and large-scale enterprises. Small and medium sized enterprises make up the rast majority of businesses in all countries (see Figure 20). However, their success and viability greatly differ. Country evaluators focused not only on the balance, but also on policies and institutions that promote or hinder obtaining an optimal level for each economy.

Germany really stands out with its long tradition of promoting a strong *Mittelstand*. As the Germany report highlights, SMEs account for 99 percent of all German enterprises and depending on the method of measurement between 60 and 70 percent of employment in the country. Most are service-oriented and relatively small in terms of revenue. These statistics fall within the EU average. What distinguishes the German *Mittelstand* according to the country evaluators is their competitiveness, sustainable corporate strategies including solid financial positions, good industrial relations and reputation for quality within German society as well as on an international scale. German SMEs traditionally finance a large portion of their investments through their own profits and reserves. In 2010, this proportion amounted to almost half of their total investments made. Not only due to this prudential capital ratio, but also because German SMEs traditionally maintain long-term close ties with their local banks, the Mittelstand proves successful in securing the reliable financing needed for long-term investment. This institutional coordination not only benefits SMEs in Germany, but provides the banks that fund them with insights into the information they require to properly assess the firm's profitability.



Figure 20: SME Prevalence



Source: OECD: Financing SME 2012 (Canada, US) EU Commission, SBA Factsheets 2010/2011 (EU), Year of Reference for US: 2009, USA, CAN: Firms with less than 500 employees, EU: Firms with less than 250 employees.

| Bertelsmann Stiftung

Spain received one of its highest scores on this indicator. Incentives within the legal framework in Spain have created an advantage for small-sized firms: Enterprises with less than 50 employees are not subject to laws regulating worker representation and thus enjoy more flexibility, in particular when one takes into account the animosity of social partnership in the country and the high labor costs it causes. In addition to this national provision, the Spanish government has cut back on its national industrial policies and devolved it to the regional governments. The report evaluates this decentralization as having a positive effect on the development of instruments to promote local and regional businesses at a level that is most familiar with their needs and characteristics. These promoting instruments include, among others: subsidies, development agencies, training programs, research and business centers.

It is worth highlighting the imbalance of small-, medium- and large-sized companies in the French economy and measures taken to rectify it. The lack of a strong Mittelstand in France has deep roots, with a tradition of a few very large and powerful firms on the one hand and very small, local enterprises on the other. As a cornerstone of a new industrial policy, the promotion of SME regional clusters (*poles de compétitivité*) similar to the German Competence Networks, foster innovation and synergies through strategic partnerships between manufacturers, research labs and training centers, bringing them together to work together in the same location. For each of the first two stages

from 2006-2008 and from 2009-2011, the government invested 1.5 billion Euro. As an excellence cluster, award-winners simultaneously become distinguished with a quality seal. Eighty percent of the award-winning clusters during the first phase of the program involved partnerships with SMEs. As part of this industrial strategy to better develop the competitiveness of medium-sized enterprises, the new strategy merged the French Innovation Agency and the SME development bank merged into the OSEO group, which provides SMEs with more concentrated financing.

Despite these major policy efforts to build up a more substantial sector of prosperous medium-sized firms, French SMEs continue to be plagued by low levels of profitability as well as insufficient financing and investment rates. However, the emergence of a strong Mittelstand requires consistency of policy and a long-term horizon. The implementation of new institutions takes time. In line with the structural approach to measuring the social market economy, these French reforms received a positive evaluation, even though the short-term performance does not yet reflect these changes.

Country reports described an array of policies that either fostered or hindered the development of SMEs. Depending on the diverse challenges faced in other areas of industrial policy as well as the initial level of SME development, countries sought diverging strategies that directly or indirectly affect SMEs. Canada encourages SMEs directly by charging them a lower tax rate than other companies. Faced with a need to increase transparency in the corporate sector after a series of accounting scandals (Enron, WorldCom and Tyco to name a few) in the United States, law-makers enacted the Sarbanes-Oxley Act in order to help protect the rights of investors. As an unintended consequence, however, the law increased regulatory hurdles for SMEs. These policies, however, must be seen within the context of a variety of others, which all play a role in SME development.

Manager Liability

Swedish law has an array of provisions that earned the country the highest ranking for institutions that promote responsible management, holding individuals accountable for their actions and decisions they make on behalf of the firm. Enacted in 2005, the Companies Act makes a founder, manager or board member of a company personally responsible for damages to the firm and stakeholders on account of negligence, carelessness or intent. In order to counterbalance the lack of risk-taking that such a law might induce, it is common for these individuals to take out or be offered insurance for potential damages. However, insurance does not cover damages due to intentional, criminal behavior such as balance sheet manipulation or corruption.

In light of the most recent financial crisis, an increased awareness of the desire across many countries to eliminate or reduce remuneration schemes that promote short-term profit orientation can be seen. Widespread public discussion in favor of increasing personal liability among corporate CEOs ensued in all countries that at the onset of the crisis had either weak legislation or enforcement of personal liability in the private sector. However, differences exist in the speed with which changes to laws, regulations and other instruments have actually occurred.



France stands out as a country that has been tackling what was seen previously as an imbalanced relationship between economic profit and liability for losses. In particular, both the conservative and socialist governments have taken regulating steps to more consistently link management performance with remuneration. Directly following the 2009 crisis, President Sarkozy decreed a prohibition of rewarding managers with generous severance pay in cases where they caused their company severe losses. After the inauguration of President Hollande in 2012, the Socialist government went even further, capping the CEO-worker pay ratio at 20:1, arguing that performance could not justify larger differences in salary.

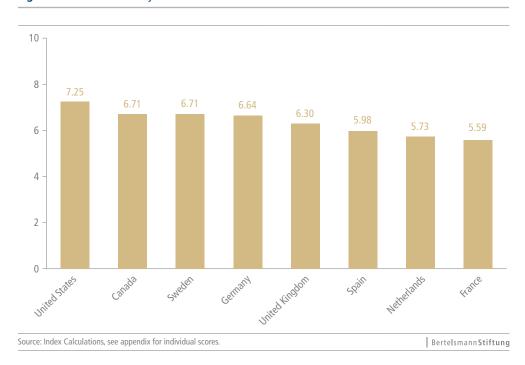
Low scores in both the United Kingdom and the United States partially reflect the widespread usage of incentive systems that promote short-term profit orientation without negative consequences in the case of poor performance. Serious perverse incentives continued also after the crisis despite public debate. Although the prevention mechanisms for irresponsible manager behavior in these two countries are limited, firm owners and others harmed by some business action can take recourse to liability law after experiencing losses. Because the burden of proving causality in the Netherlands is particularly high and liability laws comparatively underdeveloped, this option most often does not exist for similar cases in the Netherlands.

The United States forms a rather extreme case among the eight countries evaluated in terms of the lack of regulation of management in the private sector in general and of the corporate sector in particular. While the US government did react to the poor performance of corporate governance with the Dodd-Frank Act following the financial turmoil of 2008-2009, it still has not gone nearly as far as other countries' regulations in terms of the control equity holders have over the salary and bonus structure in the management of the firms in which they own shares. Moreover, the importance of the interaction between corporate governance regulations and the structure of the economy become particularly apparent in the case of the United States. The unprecedented growth in the power of corporations and of corporate managers is reflected in the world's largest ratio of CEO compensation to the average worker salary and the trend toward "ownerless corporations" in which the time an average share is held in the US has decreased from 4 years to 2 months in the United States between 1945 and 2008. Experts argue that this ever quicker changing of hands can have two important subsequent consequences. The first consequence is that the very fast turnover gives shareholders less and less of an incentive to influence the discipline within management. The second is that it often leads to an ever higher concentration of corporate wealth in the hands of a few owners.

CATEGORY III: ECONOMIC AND ECOLOGICAL SUSTAINABILITY

FINANCIAL STABILITY

Figure 21: Financial Stability



Central Bank Independence and Goals

Only a central bank independent of the government can ensure lasting monetary stability. "Independence" in this sense encompasses several traits: 1. Policy independence (free choice of instruments and goals); 2. Financial independence; 3. Personal independence, i.e. central bank chairmen and boards are not solely chosen by the current government. Central banks whose independence is not ensured are prone to pressure and influence by the government. In times of economic depression, it can be tempting to lower interest rates or commercial banks' reserve requirements to boost lending and stimulate the economy. Yet in the long run this typically leads to higher inflation. The prime goal of a central bank should be price stability. Additional goals such as full employment can be pursued. The question in the index regarded both central bank independence and goals.

Both Sweden and Canada received the highest possible score for this indicator for their high levels of independence and concentration on one goal: price stability.



In the case of Sweden, a member of the European Union, but not of the EMU, the relevant central bank is the national Riksbanken, not the European Central Bank. It obtained independence in 1999 and is the sole body deciding on monetary policy. Its goals are to maintain price stability and to ensure a safe and efficient payments system. The target inflation rate is 2 percent. This focus on monetary stability emerged as a new direction in the 1980s. Before this point, the Riksbank set a policy of strategic currency devaluation in order to increase its industrial competitiveness.

The Bank of Canada ranks high on all indices of central bank independence, be they based on policy independence, financial independence or personal independence, e.g. of board members. The Bank of Canada's foremost goal is price stability which it pursues through an explicit inflation targeting objective, currently set at an average CPI inflation of 2 percent.

For the US, the Federal Reserve ranks even higher than the Canadian Central Bank on most indices of central bank independence. Even though the Fed enjoys a high degree of independence, it is not entirely shielded from political influence. Its chairman and vice chairman are appointed by political actors – the US President and the Senate. Their influence however is curbed by the long 14-year tenure of the members of the Fed's Board of Governors. The US owes its low score on this indicator to the fact that it does not concentrate exclusively on price stability, but also strives toward the goal of full employment.

The relevant central bank for all EMU members is the European Central Bank. The ECB's independence and price stability objective are stated in the EU Treaty. Yet the European debt crisis has damaged investors' and citizens' confidence in price stability. Following days of open political pressure to do so, the ECB began purchasing government bonds. Whether the ECB made this decision based on political pressure remains debated. Moreover, the use of various forms of monetary easing during further raised criticisms about the singular goal of the ECB.

While all Euro members relinquished their national monetary authority to the ECB, some national central banks try to keep their own profile. Sometimes it is unclear whether they act as representatives of systemic interests or of particular banks. Because all of the economies in the EMU nevertheless share one monetary policy and the collective risk that it creates, scores are the same for all countries. However, the country reports do offer insights into diverging positions of the national central banks within this framework.

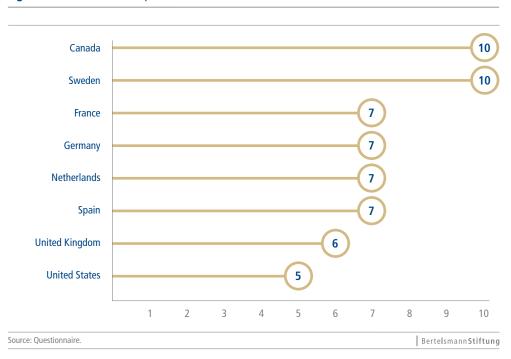


Figure 22: Central Bank Independence

The ECB and the Federal Reserve exhibit different objectives – the Fed must pay equal attention to price stability and growth, the EU exclusively focuses on price stability. Yet their policies do not differ greatly. The ECB's inherent problem is that it must cope with extremely heterogeneous economies. As there is no one-size-fits-all monetary policy, the ECB almost has to fall short of achieving price stability through interest rate manipulation. Major structural reform might be the only way to ensure the ECB's independence in the long run. The independence of the European Central Bank remains controversial in France, yet the country has enjoyed two decades of very moderate inflation rates.

In Spain, the European Central Bank's monetary policy was mismatched with the country's economic conditions – real interest rates were too low (even negative) when the economy was growing, and too high when it contracted. This exacerbated the financial bubble that led to the banking crisis. The institutions responsible to supervise the conditions of the bank bailout (the ECB, European Commission, European Banking Authority and the IMF) have demanded a more independent role of the Spanish Central bank, i.e. a less prominent position in the implementation and supervision of the bailout.

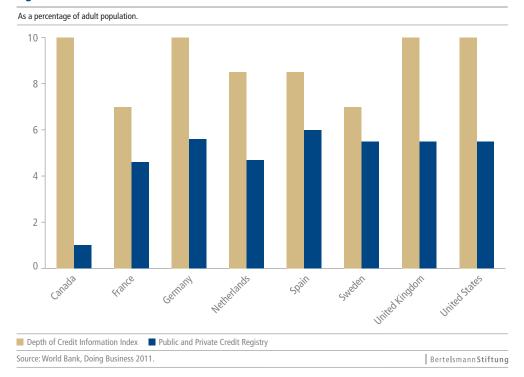
Germany's *Bundesbank* tries to preserve the heritage of the monetarily stable era of the Deutsche Mark and reacted negatively to the ECB's quantitative easing policies during the financial crisis. It claims that by yielding to political pressure, the ECB damaged its reputation as an independent body and encouraged moral hazard on the part of private banks.



The Bank of England's prime objective is to maintain inflation at a low level, the exact number to be determined by the government. The bank then implements the target and supports the government's economic policy, provided inflation is near its target. The BoE has formally been independent of the government in terms of monetary policy since 1997, yet this independence has been tested recently when the bank supported the government's expansive policies through quantitative easing.

Credit information

Figure 23: Credit Information



Prevention of Too-Big-to-Fail

Competition in the financial sector ensures higher-quality services and lower prices, i.e. interest rates. Given the central role that interest rates play in the well-being of an economy, the competitive structure of a country's financial sector bears significant trickle-down effects on its entirely economy, both real and nominal. Moreover, a high number of smaller suppliers in the financial sector typically leads to more stability than a small number of large ones that might pose a systemic risk when over-leveraged or otherwise in trouble.

Figure 24: Bank Asset Concentration







Before the financial crisis, the Spanish financial sector was highly competitive, with banking groups competing with numerous smaller savings banks. Credit volumes were high and interest rates low. Then the financial crisis hit Spain, and several savings banks encountered solvency crises. The larger banking groups were able to obtain liquidity by trading their assets and liabilities for cash with the ECB. But in order to strengthen the fragile savings banks, a Royal Decree Law was enacted that forced several of the savings banks into mergers among themselves or with one of the two large banking groups, reducing their number from 46 to 13.

This trend is expected to continue, leading to further concentration in the Spanish financial sector. It illustrates how the problem of institutions that are "too big to fail" is often the result of competition pressure in the banking sector rather than a lack thereof. It can be argued that Spain does have a "too big to fail" problem, yet that it is not so much at the root of Spain's financial woes as the flagging savings banks. Along with the forced mergers and bailout goes a shift in the activities of savings banks – initially geared towards small businesses and other low-volume lending, they must now act as "foundations", possibly further adding to concentration in the sector and potentially aggravating the well-being of SMEs.

Much like the Spanish banking sector, the Dutch one is highly concentrated. The country's open financial market as well as global competition to the Netherland's large banks are helpful, but the domestic market is dominated by only three main players. The low number of banks poses a threat to financial stability, as bank customers' assets are guaranteed by the Dutch government. Banks such as ING have grown so large during the past years that a bank run might ruin the Dutch state.

The German banking landscape is made up of several pillars – public sector banks (largely owned by local governments), private banks, special-purpose banks (e.g. mortgage banks) and cooperative banks, in descending order of importance. This varied structure together with a high number of institutions provides ample competition. But high leverage and low profitability leave the financial system vulnerable to shocks, as was displayed during the financial crisis when public-sector banks suffered high losses from toxic assets. Cooperative banks and local Sparkassen continued to supply credit and thus spared German companies a severe credit crunch.

The British financial system is market-based, and the financial sector's contribution to GDP is large. Two recent events though illustrate that larger banks are more protected from competition than smaller ones: Firstly, the quasi-nationalization of Royal Bank of Scotland to save it from insolvency, and, secondly, the Libor scandal of the summer of 2012. Broader reforms to avoid "too big to fail" hazards instead of patchy solutions aimed at isolated institutions are yet to be implemented. France's largest three banks account for 50 percent of total bank assets, less than in Canada, Germany or the UK, and the country's banking sector can be characterized as highly competitive. This is in spite of an oligopolistic structure where six banking groups hold 80 percent of outstanding loans and 90 percent of deposits.

During the past years, competition in the Swedish financial sector has increased as banks, insurance companies and retail outlets started offering similar financial products such as life insurance. Yet the banking sector is still dominated by four banks representing about 80 percent of total bank assets. The picture is similar in the life insurance market where the four largest firms command 73 percent of the market. Hence, each major actor in Swedish banking and insurance is "too big to fail", and the belief that the government would bail out banks – as it has done before – creates moral hazard.

Canada's largest three banks account for 58 percent of total bank assets, but despite this asset concentration the Canadian financial sector can be characterized as fairly competitive, on par with Germany and France. The Canadian domestic market is relatively small, and basic services are often more expensive than elsewhere, but smaller foreign-owned banks and credit unions fuel competition. Canadian banks are financially stable, mainly due to capital requirements that are higher than stipulated by the Basel II accord. The competitive situation in the insurance market is similar.

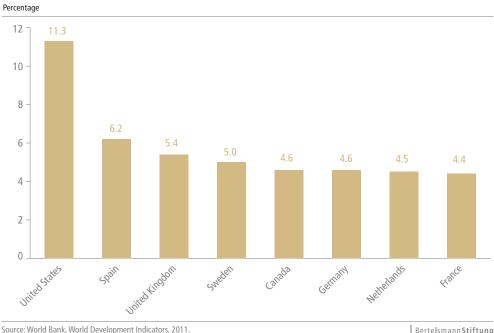
Competition in the US American financial system is less pronounced than it used to be and the past years has given rise to concerns over institutions that are "too big to fail". This development was fuelled by the Troubled Asset Relief Program that provided high sums to keep distressed banks afloat during the financial crisis. It also led larger institutions to now being able to borrow at lower costs than smaller ones. Yet bank concentration in the US is still lower than in the UK, Canada and France. To counter the rising concentration, current policy proposals include using the Dodd-Frank Act to wind down large financial institutions presenting a systemic risk without causing moral hazard.

Bank Capital to Assets Ratio

This indicator measures the ratio (in percent) of bank capital and reserves to all non-financial and financial assets in an economy. Of the 8 countries in the sample, the United States has the most capitalized banking sector, with France, the Netherlands, Canada and Germany on the lower end of the scale.



Figure 26: Bank Capital to Assets Ratio



Source: World Bank, World Development Indicators, 2011.

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Equity Ratio of Companies

In light of the global financial crisis, many financial stability reports have focused on the development of equity ratios of not only banks, but other companies as well. Still others have looked into institutional influences for enterprises to leverage assets primarily using either short- or long-term debt, a choice which in turn affects growth. In an international comparison of 39 countries from 1991-2006, Canada, the United States, the United Kingdom, Sweden, Germany and the Netherlands show above-average equity ratios, while Spain and France had average equity ratios among the companies surveyed.²⁸

The country reports made an effort to discuss the development of equity ratios also during and after the crisis. While capitalization of French companies remained low throughout the late 1990s, it increased by 10 percentage points by 2010, to an average of 37 percent. In fact, the French report, citing a Banque de France bulletin, emphasized that the reduction of debt and increase in capitalization prior to the global financial and economic crisis significantly helped French companies weather the crisis. Similarly, the Germany report highlights the pivotal role of strengthening balance sheets from an already comparatively high level before the onset of the crisis in limiting the amount of insolvencies at the onset of the crisis. The rather low number of insolvencies of German companies is instructive, considering the relatively sharp decline in GDP.

²⁸Fan, Titman and Twite 2012.



Figure 27: Equity Ratio of Companies

Before the crisis, equity ratios for US companies were on average above those of their European counterparts, briefly decreased during the crisis and then increased back up to European levels.

CONSISTENCY OF POLICY

Germany scores high on the principle of consistency of policy, largely due to the fact that it is the only country of the 8 examined that has established a debt-brake in its constitution. Introduced in 2011, this reform will limit the structural deficit of the federal government to .35 percent of GDP. It also requires the federal states to balance their budgets with regard to structural deficit beginning in 2020.²⁹

Aging populations across the OECD, coupled with increasing societal expectations and demands on pension systems present an enormous challenge for public finances. Best practices in coping with demographic change vary across countries, but sustainable policies should share a common goal of linking the pension system with life expectancy. With the exception of the Netherlands and Spain, all of the examined countries have reformed their pension systems to address demographic challenges to sustainable financing. ³⁰ Consequently, these two countries lost points for this absence.

 $^{^{29}} OECD: "Restoring Public Finances": http://www.oecd.org/dataoecd/51/58/47558957.pdf$

³⁰ For an overview of the different policies implemented linking life expectancy with the pension system, see the OECD publication "Pensions at a Glance".



Demographic change likewise exerts pressure on the OECD economies to retain and build human capital among existing workers. Economies in which companies invest in continuing education and training help to prevent the deterioration of capital stock will be better equipped to sustain growth and good jobs over time. While none of the countries received close to the optimal score and could all improve the institutional framework that fosters such investment, Sweden received the best evaluation for this indicator and Spain the lowest.

The portion of employee income that workers pay toward income tax and social security contributions serves as an indicator of how states choose to structure the burden of financing their benefits systems.

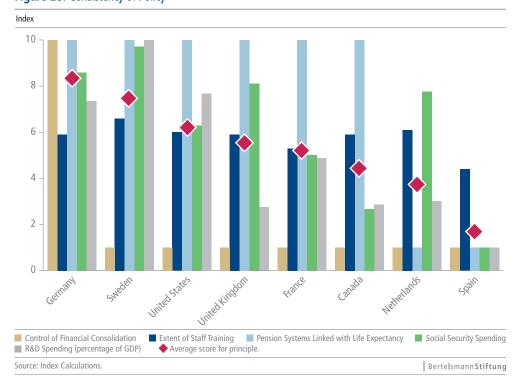


Figure 28: Consistency of Policy

EFFICIENT ENVIRONMENTAL PROTECTION

Economies that manage to establish rules and incentives to internalize some of the externalities associated with production and consumption contribute to sustainability. While market economy instruments are preferred to regulation and state intervention when feasible, rules and institutions established and enforced by the state play an important role in the case of market failure. Among the surveyed countries, Sweden scores highest on this indicator due to its use of market economy instruments, effective environmental policy and relatively high proportion of revenues from environmental taxes. The Netherlands compensates for lower scores in market instruments

and environmental policies with its very high proportion of revenue from green taxes. On the other end of the spectrum, the United States and Canada score low in these areas.

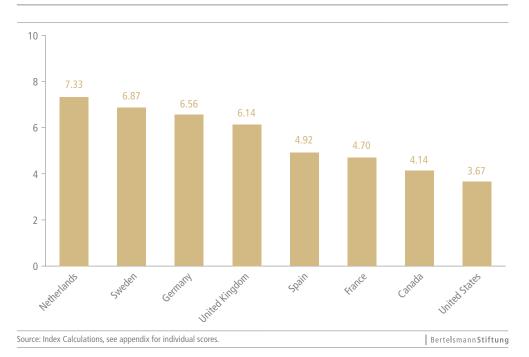


Figure 29: Efficient Environment Protection

Market Economy Instruments

No country scored particularly high for its market instruments applied to internalize the costs of externalities. Most country reports focused on the negative externalities, as policy-makers in most of the examined countries tend to allocate more attention to punishing negative externalities than rewarding positive ones. One example mentioned in the Germany report pertains to the lack of tax credits for research and development. Tax credits for R&D have the advantage that they distort markets less than when the state chooses champions and subsidizes them.

In terms of instruments to correct negative externalities, the majority included in the evaluations relates to the field of environmental policy. The EU Emissions Trading System earned European countries higher scores than the United States and Canada for its extensiveness. However, many individual policies were taken into account in order to arrive at an overall assessment of market instruments. Due to European Union law, the rules for environmental policy of the member countries are very similar. However, compliance and enforcement varies, resulting in slightly differing scores. Levels of subsidies to pollution-intensive industries as is the case in Germany and Spain as well as differing levels of gas taxes (see Figure 30) present further examples of policy areas that greatly diverge within the same EU legal framework.



Figure 30: Gasoline Taxes

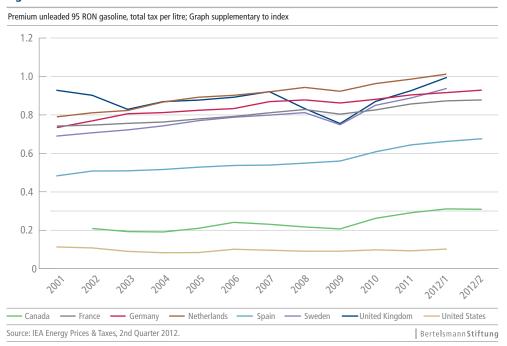
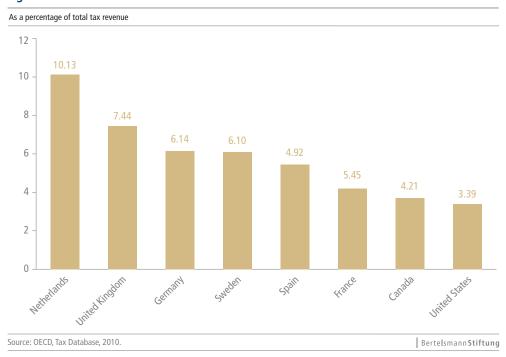


Figure 31: Revenue from Green Taxes



Sweden received the highest score of an 8. The country uses an array of taxes that raise the price of certain goods closer to their actual cost. While its overall transportation costs remain relatively low, far from what their actual cost would be with the inclusion of externalities, the country does charge tobacco and alcohol taxes as well as a congestion tax. In contrast to Germany, which received a score of a 7, Sweden applies the revenue from green taxes like the congestion tax to finance improvements in public transportation and infrastructure. In Germany, many have criticized that policy-makers channel revenue from its energy tax to finance the social security system rather than toward environmentally friendly investments. Also, motorway tolls for private passenger vehicles, absent in Germany, would prove more consistent by charging those who use the roads and cause traffic and pollution, to pay for these externalities. The current policy uses tax financing from the general population.

While Germany stands out in its early awareness of environmental issues on the policy agenda, its market mechanisms received only an average assessment. One important criticism highlighted the market-distorting effect of expensive solar energy subsidies, which moreover discriminate between different types of renewable energy.

Both Canada and the United States demonstrate very different policies and levels of policy effort toward internalization of externalities depending on the province or state. British Columbia (BC) surpasses the national Canadian policy effort by having implemented its own carbon tax. At the same time, inter-provincial correction of externalities is lacking, as exemplified by the oil sands "Northern Gateway" project from Alberta to BC: while the former would collect royalties for the project, the environmental risk lies to a large extent in BC. Similar to the provincial institutions for correcting externalities in Canada, California and New York stand out in the United States for their market-based internalization laws at the state level. Because of the underdevelopment of laws and incentives for internalizing externalities at the national level, the United States scored low on this indicator.

Environmental Policy

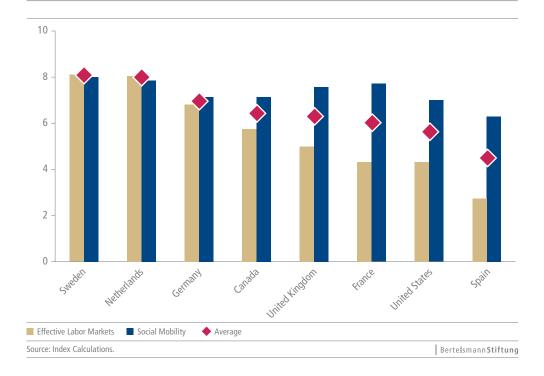
Sweden and Germany received high scores for the quality of their environmental policies. Both countries have made substantial policy efforts to reduce CO2 emissions and have invested heavily in the development of renewable energy. Canada, the Netherlands and Spain tie for last place on this indicator. Canada's oil sands project in Alberta remains of major concern, still lacking sufficient environmental policies to adequately mitigate risk and damage to the environment. While the Netherlands invests in clean technologies, it received a low score for its lack of policy orientation toward renewable energies and conservation. Spain, in contrast, has implemented policies and set targets to reach the country's and EU's renewable energy objectives, but scored low due to the low efficacy of these policies.



CATEGORY IV: SOCIAL INCLUSION

Sweden and the Netherlands scored the highest on this category, reflecting consistently strong institutions for effective labor markets and social inclusion. France, the UK and the US perform poorly in this category for different reasons elaborated on in the following sections. Spain received the lowest score in the social inclusion category above all because of its weak institutional framework in the area of effective labor markets.

Figure 32: Social Inclusion



EFFECTIVE LABOR MARKETS

Preventing Duality

A dual labor market characterizes asymmetries between a primary and a secondary labor market. In the former, workers enjoy high employment protection, long-term contracts and relatively generous remuneration and benefits. The latter tends toward low job security, temporary contracts and low wages. Dual labor markets are often associated with an "insider-outsider" cleavage, in which incumbent workers receive a higher salary or protection in comparison to new workers. Privileging some groups of workers to a high degree tends to raise the overall unemployment rate and decrease economic efficiency.

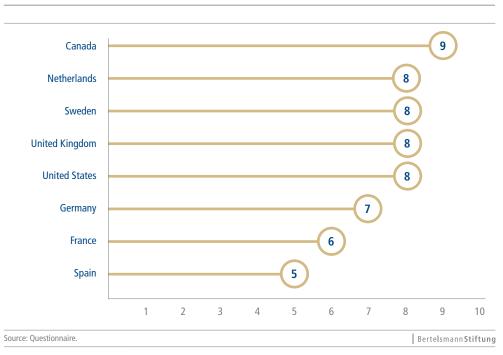


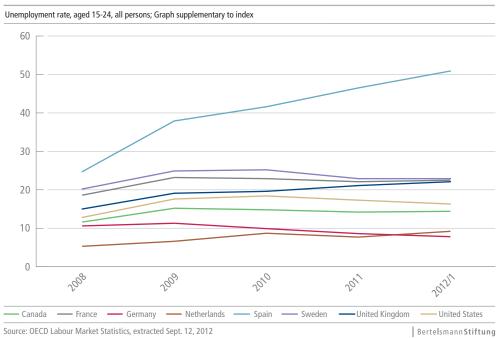
Figure 33: Prevention of Duality

Some signs of a dual labor market include the existence of many and varying forms of contracts or excessively high barriers to employee dismissal. This question assessed the extent to which the legal framework prevents unjustified differences in compensation and allows for sufficient flexibility for the labor market. Scores range between 5 and 9, with Canada receiving the highest score for policies that prevent unjustified differences in compensation and working conditions and promote the efficient functioning of the labor market.

On the other end of the spectrum, Spain scored the lowest among the examined economies due to its highly dualistic labor market. On the one hand, workers with permanent contracts enjoy very high job security, little competition from outsiders and have been successful in demanding higher wages. Higher wages for insiders, however, cause higher structural unemployment. Temporary workers on the other hand, have a very low level of protection. Due to the high fixed costs associated with labor in Spain, firms often choose to hire only on a temporary basis and less often than otherwise would be the case. The youth traditionally suffer the most from rigid labor markets and in Spain youth unemployment reached over 50 percent in 2012 (see Figure 34).



Figure 34: Youth Unemployment



In addition to its effects on unemployment, Spain's dual labor market may feed into a broader cycle of productivity loss. On the one hand, inflexible, long-term contracts make it unattractive for employers to invest in the skill improvement of their workers. High wages paid to protected workers reflect their strong bargaining power rather than an efficiency wage, as they do not face competition from outsiders. On the other hand, the alternative to rigid, long-term contracts, namely flexible, fixed-term contracts that generally offer low wages, allow many otherwise non-competitive businesses to compete on the basis of cheap labor rather than high-quality products. Continued over time, this duality can reinforce a business model throughout the economy that relies on low wage, low skill work for competition. The authors of the Spanish report therefore argue that deregulation alone would not suffice to fix the spiral of what they deem a "perpetuation of low-skills, low-productivity and low-wage equilibrium". Rather, improving both social justice and efficiency in the labor market would additionally require a long-term strategic shift toward high value production and the investment in skill building that it would necessitate.

Both Spain and France have among the examined countries the highest level of employment protection, as measured by the OECD. France and the Netherlands receive only slightly higher ratings for the duality of the labor market. The Netherlands has reacted to increased duality in the last several years with the creation of commercial temporary employment agencies such as Randstad, which have successfully expanded into other countries with similar labor market structures.

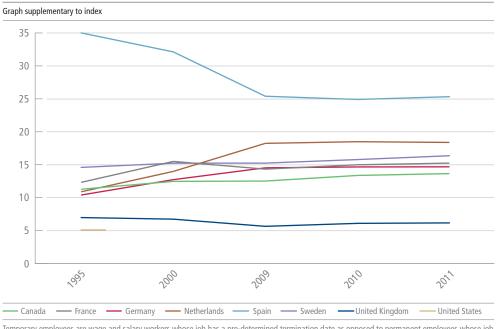
Liberal market economies scored high on this indicator. Canada, the United Kingdom and the United States avoid asymmetries in the labor market through liberal labor market policies across the board. However, some differences do exist, for example in regard to the protection level of public sector contracts and policies that determine the rules and regulations for immigrant workers. In the United States, dual labor conditions can be observed for both the formal rules as well as informal practices toward a large group of legal and illegal immigrant workers in comparison to the rest of the work force.

Sweden's labor market laws do allow for some duality, as both permanent and temporary contracts exist. In recent years, legal reforms have eased the conditions attached to temporary contracts without major changes to the rules that apply to permanent contracts. The last several years have also seen an increase in the use of temporary contracts.

Judging only by short-term performance indicators of unemployment or growth, one might expect the labor markets in Germany and Spain to exhibit dramatically different legal frameworks, regulations and practices. However, taking a structural approach accents both surprising similarities and important differences that prove instructive in identifying specific policy differences that could be further studied as explanatory factors for such diverging performance. Labor market reforms during the last decade in both countries focused on liberalizing employment contracts in the low wage sector and for temporary contracts while retaining high levels of employment protection legislation for permanent workers. In Germany, the Hartz Reforms and the recent law, the *Gesetz zur Neuausrichtung der arbeitsmarktpolitischen Instrumente* introduced more asymmetry into the labor market and thus conditions for a dual labor market. However, the Germany report points out that successful economic performance and its positive effect on the employment situation in Germany has attenuated the types of effects seen in Spain in youth and other unemployment.







Temporary employees are wage and salary workers whose job has a pre-determined termination date as opposed to permanent employees whose job is of unlimited duration. National definitions broadly conform to this generic definition, but may vary depending on national circumstances.

Source: OECD Employment Outlook 2012, Table F.

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Despite the many structural similarities and commonalities in the reform agendas in Germany and Spain, it is important to note that the level of protection in Spain remains much higher than in Germany, as evidenced by scores for employment protection legislation. This juxtaposition lends credence to the assertion in the Spain report that further deregulation of the low-wage sector might be the false instrument to decrease unemployment. Rather, more research is needed on the possible effects of and political barriers to facilitating more flexible dismissal conditions for permanent workers.

Quality of Social Partnership³¹

Social partnership traditionally implies the relationship between unions and employers' organizations. Here, this question is broadly defined in order to allow for both centralized as well as decentralized forms of cooperation. A positive relationship between the social partners requires a relatively level playing field, which may be promoted through united goals amongst unions. The absence of major frictions in the process of conflict resolution between employer and employee groups and strong practice of dialogue also tend to reflect a positive relationship between social partners.

³¹ Due to missing values for the United Kingdom and United States, this indicator was not included in the index calculations.

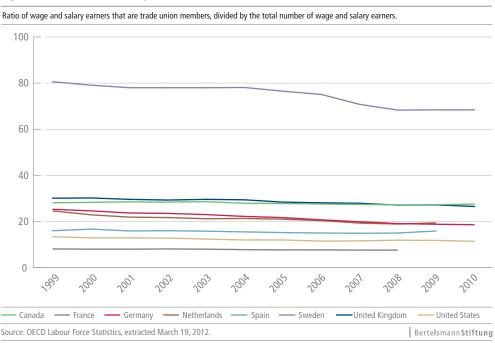


Figure 36: Trade Union Density

Across the countries examined, a trend can be seen toward more diverse interest groups both among employer and employee associations as economies move away from industrial production and toward service industries. A decreasing proportion of the workforce in most countries is unionized and unions on a national level have lost influence in comparison to a few decades ago (see Figure 36). In fact, in the United Kingdom and United States, unions have lost so much power in the private sector that they were characterized as playing an irrelevant role in industrial relations. In the United Kingdom, industrial relations were described as "fundamentally adversarial" and non-constructive. Since a series of legislative reforms in the 1980s stripped unions of their bargaining power, no meaningful institutions exist in the British private sector that could engage in economy- or sector-wide negotiations between employer and employee groups.

Both employer and employee associations across the examined countries have shifted more bargaining power to the firm level, with workers councils negotiating on behalf of employees in individual firms³² in the private sector. In majority of the countries studied, union coverage in the public sector greatly outweighed coverage in the private sector.

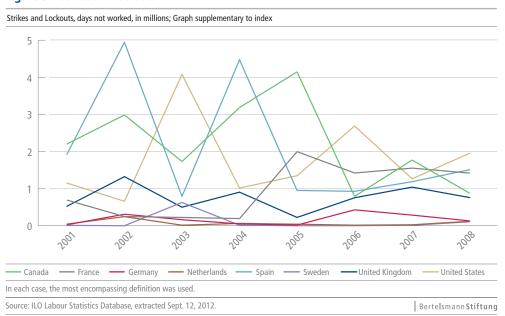
Sweden scored the highest in regard to the quality of social partnership. Collective agreements in the private and public sector cover approximately 92 percent of all employees. These agreements

 $^{^{32}}$ For more on decentralized bargaining, see the following section on employer-employee parity.



not only guarantee security for employees, but also predictability for firms, as strikes and lockouts are prohibited throughout the duration of an agreement. Trade unions have become more diversified in the past several years, as white-collar jobs have been growing and traditionally industrial jobs decreasing so that dominant unions have lost their former near monopoly on the representation of workers' interests. The low number of strikes in Sweden compared to the OECD average indicates a relatively balanced social partnership.

Figure 37: Strikes and Lockouts



Similar to Sweden, Germany also loses very few days in OECD comparison to strikes (see Figure 37) and also scored high on this indicator. Unions and employers' associations demonstrated their constructive relationship during the onset of the financial and economic crisis when they reached agreement on working time, overtime and long-term wage moderation in order to prevent job losses. During the economic downturn in 2009, social partners negotiated the use of work-time accounts (*Arbeitszeitkonten*) and work-sharing programs, known as Kurzarbeit, in 64,000 establishments around the country in order to save what the ILO estimated to be approximately 3.2 million jobs despite a decline in GDP from 2008 to 2009 of 6.8 percent.³³ At the same time, the coverage of collective agreements in Germany continues to decline. A further concern with the sustainability of the social partnership in Germany stems from the disproportionate power of some small yet very well-organized unions that can cause devastating economic damages to their employers. The report lists the transportation sector as one example.

³³ Andreas Crimmann, Frank Wießner, Lutz Bellmann. "The German work-sharing scheme: An instrument for the crisis", Conditions of Work and Employment Programme. International Labor Organization, 2010, p.53. Accessed August 28, 2012: http://www.ilo.int/wcmsp5/groups/public/—ed_protect/—protrav/—travail/documents/publication/wcms_145335.pdf.

Figure 38: Wage Development

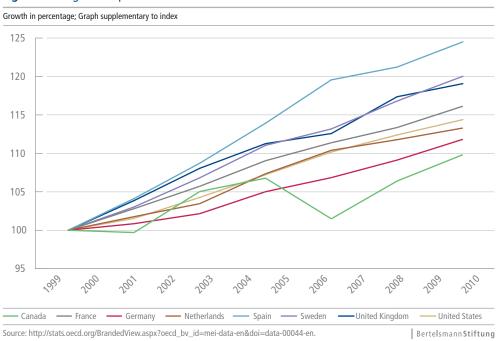
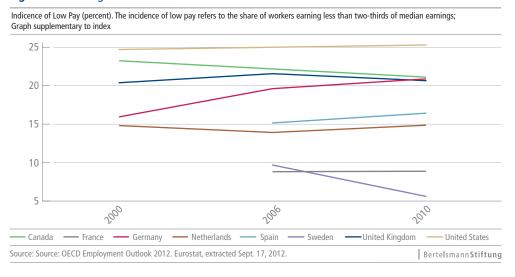


Figure 39: Working Poor



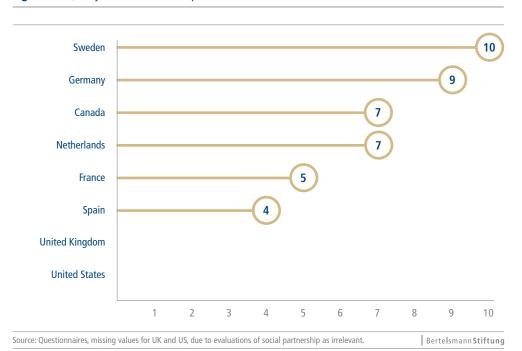
Although France lacks a long-standing tradition of positive cooperation between employers' and workers' groups and the state has been forced to break stalemate situations on numerous occasions, reforms between 2007 and 2009 have sought to encourage more constructive behavior through new rules for the representation of social partners in political debates. Some progress toward better coordination has been made, but experts expect change to be slow. Co-determination



at the firm level does not exist in France in the form of workers' councils or similar arrangements, which may prevent an arguably more efficient, decentralized bargaining process.

Social partnership in Spain was rated as non-representative in terms of both employee and employers' associations and thus detrimental to the welfare of society as a whole. Evaluators criticized that the largest firms and unions exert a disproportionate amount of influence on the bargaining

Figure 40: Quality of Social Partnership



process in the labor market, disadvantaging smaller firms and workers' groups. Contrary to the situation in Sweden and Germany, where negotiations in particular at a decentralized, firm level, generated a win-win situation for employees and employers during the most recent economic crisis, decentralized bargaining did not take place systematically in Spain, in part because this mandate was reserved for the large, national bargaining partners until the 2012 labor market reforms. Due to these reforms, firms may now strike decentralized agreements with their workers that supersede national agreements. However, the effects of these reforms in practice are yet to be determined.

Employer-Employee Parity

Institutions that balance the interests of employers and employees are essential to prevent exploitation and ensure an efficient functioning of the labor market. While functional cooperation among social partners at the national and sectoral level can aid in achieving this balance, cooperation at the decentralized, firm level also plays an important role.

Only some of the countries have established mechanisms for cooperation at the firm level such as workers councils and institutionalized forms of participation in the decision-making process or co-determination. In Germany, the Co-determination Act of 1976 facilitates this micro-level cooperation. Beyond cooperation, this act establishes a framework for worker participation in firm supervisory and management boards as well as workers councils. Institutions at all three of these levels greatly contribute to private sector transparency. At the same time, they ensure property rights through a balance within the bodies that favors owners.

The United States received a low score for employer-employee parity due to a relatively low level of workers' rights, a consistent ranking among OECD countries for the most liberal dismissal policies and lowest level of worker protection as well as the lack of forums through which widespread participation or co-determination could take place. As a sign of an unbalanced power constellation, the US report cites the stagnating real income level of workers in the United States since the 1990s despite business profit margins reaching a 65-year high. While other countries with a more balanced employer-employee parity have bargained for wage moderation, workers – in contrast to the situation in the United States – received job protection in return.

The US report highlights why employer-employee parity proves important beyond social considerations. Absent workers' rights and avenues of participation, executive policy decisions often

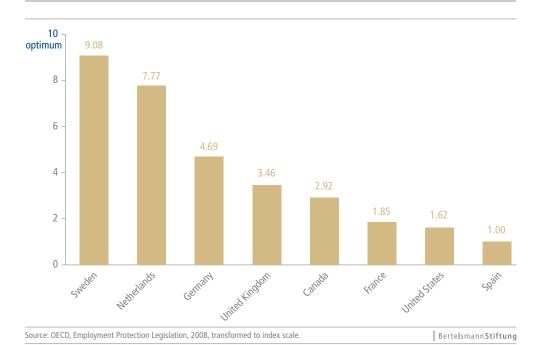


Figure 41: Employment Protection Legislation



remain intransparent. A culture and legal framework that foster employee participation in firm-level decisions might therefore lead to improved corporate governance and economic decisions that benefit the firm as a whole.

Although experts assessed the role of unions in Canada as decreasingly influential and relatively unimportant in shaping labor policy, the country experts rated the institutional environment for ensuring a balance between labor and capital friendly policies as adequate. The Department of Labor on the federal and provincial level, however, heavily intervenes in labor relations to achieve this balance. In optimally functioning industrial relations in line with the ordoliberal philosophy, the state fosters parity through a legal framework, but should not need to intervene in procedural relations.

Effective Labor Market Programs

Effective labor market programs provide skills that reduce long term unemployment and help to bring the capabilities of the workforce in line with the capabilities required by firms. To be cost effective, those programs should be open only to those whose labor market prospects could be improved. The amount of spending on active labor market policies (ALMPs), controlled for unemployment levels, does not necessarily indicate the quality of the programs enacted, but does indicate the extent to which policy makers prioritize active labor market policies. For this reason, the IMSME supplemented this spending indicator by an evaluation of the efficacy of these programs.

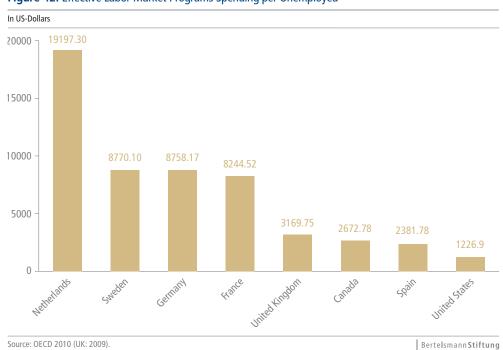


Figure 42: Effective Labor Market Programs Spending per Unemployed



Figure 43: Effective Labor Market Programs

In Spain, the government primarily devolved the implementation of ALMP to employers' associations and unions and equipped them with subsidies for this purpose. However, while this decentralized approach might seem effective in theory, a lack of monitoring and enforcement of how the funds were actually spent led to serious inconsistencies. The Spain report lists problems with corruption and re-channeling of the funds for purposes other than the agreed upon training provisions, which have proven detrimental to the cost-effectiveness of the Spanish programs. Despite moderate spending on ALMP in relation to its GDP, Spain received the lowest score for the effectiveness of its policies.

Because the group of countries generally described as liberal market economies aims toward more generalized skill sets and labor mobility rather than highly differentiated, specific skills, it is not surprising that they invest less in retraining and job counseling programs than do more coordinated economies. The UK spends little on retraining and other active labor market programs and the efficacy of the programs it does fund were characterized as "poorly organized" and failing to target weaker groups of the unemployed that however could have been reintegrated into the job market. For these reasons, the UK received one of the lowest scores on this indicator.

Also commensurate with its liberal model, the United States spends little on ALMPs and offers retraining, job search and relocation subsidies less systematically than many European countries. However, these policies do exist on a lower level. Also, the US report stressed the importance of

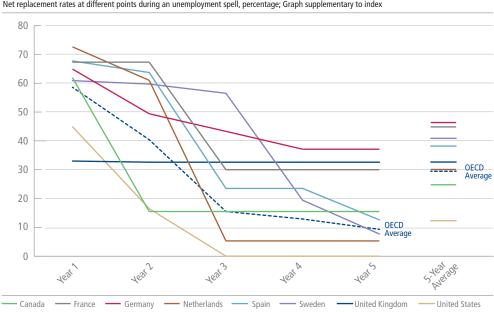


the widespread on-the-job training in the United States, which may help the work force remain flexible, mobile and dynamic. Whereas ALMP investment coincides to some extent with the expectation that workers first acquire certain skills and then a job, US companies often exhibit a willingness to first hire workers and then train them on the job as needed. Additionally, an abundant supply of private retraining programs offered at private colleges and firms exist at a private cost to the trainee. Therefore, despite low spending on ALMP, the US received a higher score than some countries with higher spending.

Germany received the highest score for the effectiveness of its labor market programs, largely due to the *Hartz* Reforms from 2003-4. The *Hartz* Reforms amounted to comprehensive and deep reforms that aimed, inter alia, to reintegrate long-term unemployed into the labor market through a combination of job creation and training measures as well as reforms to the unemployment and welfare regimes that incentivized employment. While not all of the measures proved successful and criticisms abound, these reforms succeeded in activating large portions of the unemployed population. Germany also received the highest score due to its impact evaluations of its ALMPs that conform to high academic evaluation standards and inform the government and labor offices as they adjust their future financial investments accordingly. A cost-effectiveness assessment enabled the government to cut back on spending and more efficiently invest in instruments that offer a high probability of success.

Figure 44: Level of unemployment benefits by duration of the unemployment spell, year 2011

Net replacement rates at different points during an unemployment spell, percentage; Graph supplementary to index



After tax and including unemployment benefits and family benefits. No qualification for cash housing assistance or social assistance. Family situation: four different stylised family types (single and one-earner couples, with and without children) and two earnings levels (67% and 100% of average full-time wages).

Source: http://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2011_empl_outlook-2011-en, P. 40.

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Locally administered and individually tailored, ALMP in Sweden entails three phases. In a first phase, local labor market boards of municipalities offer job search, coaching and other preparatory services. Following these activities, the job matching and training follows. In a final stage, participants receive the opportunity to build experience and qualifications and acquire references from a cooperating employer. Other measures include welfare incentives to work and also to continue skill building. The infrastructure in Sweden is favorable to this type of ALMP in particular, as its life-long education schemes are well developed. Sweden, like Germany, evaluates the effectiveness of its ALMPs.

Confronted with growing unemployment, France began active policies to bring more citizens into the workforce in the 1970s. However, rather than taking bold measures to activate the labor supply, policies sought to increase labor demand by reducing the required social contribution from employers. Notwithstanding a positive effect on employment, labor costs remain high. Additionally, policy-makers reduced the work week to 35 hours in 2000. While the *Plan d'Aide au Retour à l'Emploi* (PARE program), implemented in 2001, aided the reintegration of the unemployed into the labor market through counseling and matching assistance, France has been hesitant to combine employment assistance with flexibility measures and welfare to work reforms.

SOCIAL MOBILITY

Fundamental protections from absolute poverty and discrimination are basic prerequisites for social mobility. They do not suffice to guarantee equal starting chances in life, but without a assurance of a minimal level of financial security and functioning institutions that guarantee equality of rights, social mobility is not possible. On these three indicators, results were mixed. France received the highest possible points for its provision of a minimal social security that succeeds in spanning a social net that catches the vast majority of need cases. Its non-discrimination and social inclusion institutions, on the other hand, show serious weaknesses and do not prevent systemic discrimination of minority groups and those of low socio-economic backgrounds. Sweden, in contrast, exceeds in all three areas of non-discrimination and social inclusion as well as providing a guaranteed minimum social security. As such, Sweden again receives the highest marks on these indicators because of its focus on enabling mobility through equal opportunities rather than merely offering financial compensation for social exclusion. A juxtaposition of these three indicators with that of "Income Taxation and Incentives to Work" confirms this balance in Sweden between providing financial security on the one hand and enabling workers to provide for their own social inclusion on the other, by establishing incentives to work and equal chances to take advantage of these opportunities.

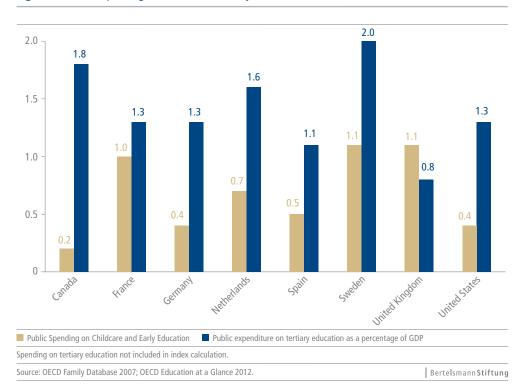


Early Childhood Education Spending

Early childhood development is increasingly seen as the primary building block for further educational attainment and subsequently for social mobility later in life.³⁴ Moreover, effective policies that go beyond family allowances to ensure sufficient quality infrastructure for childcare and early childhood education also increase opportunities for social mobility among parents, in particular among women. In the absence of data on the availability and quality of early childhood infrastructure, this indicator scores state spending on early childhood education and care.

OECD studies conclude that most member states underfund early childhood education and policies to support families. Sweden, the UK and France prove exceptions to this rule and therefore scored high on this indicator. The majority of the countries in the sample spend a comparatively small amount of their GDP on these programs. Canada, Germany and the United States find themselves on the lower end of the spectrum. Interestingly, many of these same countries invest heavily in post-secondary school education. Promoting social mobility through equal opportunities, however, would require a shift in the weight of these two priorities.





³⁴ For an international comparison of the quality of policy efforts in central areas that promote early childhood education, see the OECD series "Starting Strong: Early Childhood Education and Care".
³⁵ Ibid.

Education Structures

Following early childhood education, the first years of compulsory education prove pivotal in shaping the further education and career path along which students progress. Sweden ranks high on the indicator of permeable education structures. Its Education Act of 2010 took a bold step in international comparison toward guaranteeing equal access to an equivalent regardless of geographic location or socioeconomic background. The state furthermore covers all school materials, meals, health care and transport to and from school during the first 9 compulsory years of education. These policies focused on increasing equal opportunities go well beyond common instruments used across the OECD. Sweden also owes its high score to its well-developed infrastructure and practices in the field of life-long learning. In cooperation with the institutions responsible for active labor market policies, life-long learning programs often feed directly into the labor market, enabling possibilities to switch career paths. Despite these policy efforts, Sweden does struggle to achieve intergenerational mobility in particular among immigrant populations.

Canada' success in the area of intergenerational mobility is often attributed to its widespread access to post-secondary education. Universities and colleges charge on average low tuition and an easily accessible financial assistance infrastructure makes higher education feasible for most of the population. Similar to Sweden's difficulty to include its immigrant population, Canada struggles to create equal opportunities for First Nation communities. In comparison to Sweden, however, policies to include this minority population are not as encompassing.

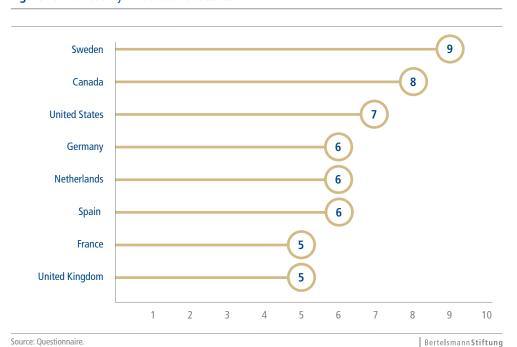


Figure 46: Permeability of Education Structures



Germany receives a great deal of criticism for the stratification and social selectivity of its education system, which the OECD assesses as exacerbating socio-economic cleavages. Educational attainment in Germany highly correlates with socio-economic status and education levels of one's parents. Its federal system furthermore allows for gross regional disparities, which the law and policies in Sweden for example seek to mitigate. Regarding informal institutions, coordination mechanisms between the states are lacking, which would otherwise allow them to improve mutual learning from best practices. While this indicator focuses on the degree to which education structures are flexible and permeable, fostering equal opportunities, the advantages to the German economy of educational segmentation deserve mention. Excellent institutions for vocational training produces highly specialized and well-trained workers for the labor market who generally require less on-the-job training than in other countries. Because vocational training and labor market requirements match well, this system offers good working opportunities for those privy to them.

Education structures in both the UK and France were rated as highly socially selective. Despite an excellent primary school infrastructure, the expensive costs of secondary school result in stratifying the population at a young age. Those privy to private schools often go on to attend one of the Grand Ecoles while others attend less selective and less prestigious universities where the quality is seen as not on par with the best international standards. Beyond the social selectivity of French universities, the vocation sector, in contrast to that in Germany is underdeveloped and does not therefore offer a viable alternative for training leading to high-paying career options. Some reforms have occurred in order to better fund and incentivize dual training and education programs in cooperation with firms.

Spain serves as a counter example to France and the UK in terms of the selectivity and accessibility of its university system. The Spanish university system has experienced rapid expansion during the last decades and today boasts one of the highest attendance rates in Europe. Low tuition charges promote this trend. Low standards and the absence of performance-based funding for universities have eroded the role of a university education in fostering social mobility. University education no longer suffices as a guarantee for a good job, less so than in the other countries assessed. Vocation training does not enjoy the prestige that it does in Germany and is perceived as an alternative only for those who could not make it at university. Given very high levels of youth unemployment in Spain, the institutions of post-secondary education should be seen very critically. The ease of entering university likely hides a youth unemployment rate that is even higher than the official rate.

The United States, similar to Germany and the UK, struggles with regional disparities and does not ensure equal opportunities especially in low-income inner-city areas that often have less funding than wealthier areas. The quality deterioration of public high school education over the last decades renders the public-private school dichotomy more problematic than in earlier times in history. Moreover, the prohibitively high costs of university tuition further limit equal opportunities, despite a well-developed financial aid system. However, due to the needs of the liberal economy in the US for general skills, more options exist for changing career paths later in life than is the case

in highly-specialized, more coordinated economies like Germany, for example. A greater willingness of employers to train on the job and a cultural openness for diverse career paths reinforces this mobility later in life.

Guaranteed Minimum Social Security

Social inclusion requires that those who are not able to meet their own needs are subsidized by society at a level that prevents absolute poverty. This indicator assessed the extent to which social security benefits in the health care benefit system, pensions, unemployment insurance, invalidity insurance and family allowances meet adequate minimum levels. Many of the country reports furthermore elaborated on the crucial role of the financing scheme chosen to provide social benefits.

France finances its social security system with a mix of taxes and employer-employee contributions. Benefits are among the highest worldwide, reflected in a public social spending share of 30 percent of GDP. Traditionally contributions-based, the funding structure of the social security system increased the proportion of tax funding with the *Contribution sociale generalise* (CSG) in 1991. France's high score reflects comprehensive social benefits in the five areas investigated and in particular with respect to the provision of childcare infrastructure and family benefits as well as a highly praised and encompassing health care system.

Sweden's social benefits system is one of the most decommodified, with a tax-based financing scheme that has the goal of decreasing income inequalities. As part of the country's generous benefits system overall in the 5 areas of health care, pensions, unemployment insurance, invalidity insurance and family programs, policy efforts in the area of childcare services and generous maternity and paternity leave programs stand out and earn Sweden a high score on this indicator. These policies aim to decrease childhood poverty not only through family allowances, but more importantly by facilitating the reintegration of parents into the workforce, which brings families into higher income brackets in the long-term.

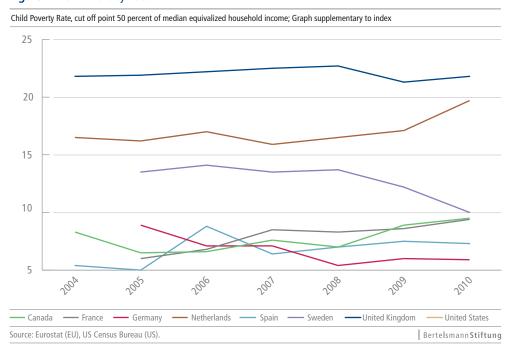
Similar to France, Germany has traditionally relied on social security contributions for financing its welfare state and likewise has increased the proportion of tax financing in recent years. In order to maintain the long-term financial viability of the welfare system and activate a larger part of the workforce, the Hartz Reforms significantly decreased the generosity of social benefits of some groups of long-term unemployed. Despite these changes, Germany's welfare state still guarantees a high level of financial security and a subsistence level to all citizens. The social benefits system has in fact supplemented its income maintenance measures that are traditionally insurance-based and targeted toward status maintenance with needs-based provisions in cases of an insufficient contribution history. Pensions, unemployment insurance, sickness pay and other tools all primarily target income maintenance in case of need. This goal contrasts that in Sweden, which also targets equality. Childcare infrastructure is underdeveloped in Germany, constraining female participation in the workforce.



Spain did not fare as well on this indicator due to its policies that neglect to include some large groups of the population in its provision of a guaranteed minimum level of security. The core social safety net provides near universal coverage in terms of pensions and unemployment insurance. However, women who traditionally have been out of the labor force for long stretches often suffer from inadequate pensions during old age. Unemployment insurance is provided for a comparatively long time and on relatively lenient terms, leading to a sluggish labor market. Other social benefits such as childcare infrastructure and family support are underdeveloped and thought to contribute to Spain's low birth rate.

The United States, together with the United Kingdom, received the lowest score on this indicator. While programs to alleviate poverty do exist, including the Earned Income Tax Credit (EITC), unemployment insurance, Social Security and Medicare/Medicaid, they do not cover many groups and fail to establish a minimum security level for the entire population (see Figure 47). Unemployment benefits are lower than in the other countries investigated and duration of wage replacement is generally shorter, which reflects the goal of worker activation in labor market policy and the promotion of general rather than specific labor market skills. Pension assistance, on the other hand, reaches over 50 million people. Nevertheless, because both Social Security and Medicare/Medicaid are financed through a regressive tax in accordance with the Federal Insurance Contributions Act, contributions burden low-income households that are not exempt. A further criticism of the institutions for funding social welfare programs lies in the overreliance on the EITC as the primary instrument for fighting poverty. Beyond the EITC, few active social programs exist in the US to fight poverty.

Figure 47: Child Poverty Rate



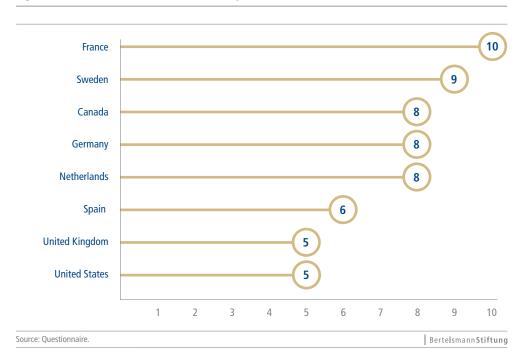


Figure 48: Guaranteed Minimum Social Security

Income Taxation and Incentives to Work

While a government-guaranteed minimum income level is necessary to avoid absolute poverty, welfare systems that lack important incentive mechanisms can also reduce labor participation, which aggravates relative poverty in the long run. Additionally, taxation systems can create incentives that encourage or discourage the entire potential workforce to participate in the labor market. Generally, income taxation and welfare policies that encourage labor market participation are evaluated positively, as employment serves as the basis for social inclusion during both working and retirement stages of life.

Not only Walter Eucken, but also most OECD countries today advocate a taxation scheme which is (directly or indirectly) progressive. In contrast to a regressive or proportional tax system, a progressive tax puts a greater burden on high incomes, both in absolute and in proportional terms. The countries scoring the highest on this indicator, Sweden, the UK and the US, all have some form of negative income tax, which makes labor market participation for low-income workers financially more attractive. In the US, the EITC subsidy for low-wage work slowly phases out as workers earn more so that incentives to increase one's labor supply remain intact. Also, the retirement age of 67 for receiving full benefits encourages older workers to continue to work and pay into the system. The US has a progressive income tax system, although tax loopholes have benefitted many high-income US citizens over the past years. Redistribution from the wealthy to the poor is scarce.



Similar to the EITC in the US, the UK implemented the Working Tax Credit (WTC) in the 2000s for the low-wage sector. The WTC reaches over 5 million low-wage workers. By implementing an employment-friendly minimum wage, the UK increased the attractiveness of low-wage work by rendering it less precarious. Like the US, the retirement age of 67 for full benefits adds an incentive for older workers to continue to work rather than retire early. While the US and UK do well in incentivizing their workforce to increase labor supply, they do less well in reducing poverty, as reflected in their scores for the previous indicator "Guaranteed Minimum Social Security". Sweden, in contrast, appears to strike a better balance.

Sweden not only scored high on its instruments for poverty reduction and minimal social security, but also on this indicator that measures incentive structures. In combination, Sweden demonstrates a balance between providing a necessary level of security on the one hand and encouraging active contribution to society and to the funding of the social system on the other. Swedish taxpayers pay most of their income tax on the municipal and regional level. While the progressivity of the Swedish tax system has decreased since 2006 due to the lowering of tax rates for the highest income brackets, the overall degree of progressivity remains high in comparison to other OECD countries. In fact, the highest marginal tax rates in Sweden amount to 56-57 percent, well above the OECD average. Despite this high marginal tax rate for the highest earners, Sweden scored high on this indicator due to conditionalities built into the unemployment benefit system, in particular for the long-term unemployed, earned income tax deductions through the jobbskatteavdrag negative income tax and an elaborate childcare infrastructure and family policies that help to increase not only incentives, but the ability to work. While the official retirement age in Sweden remains 65, the average actual retirement age is 66 due in part to policies that positively incentivize continued work with reduced hours.

Similar to the case of Sweden, the degree of progressivity in the German income tax system has decreased during the past years due to the increased importance of indirect taxes, failed adjustment for inflation and the reduction in top income tax rates. The country saw a sweeping reform when in 2005 the formerly separate social security and unemployment assistance schemes were merged to improve incentives for the unemployed to seek and accept jobs. Germany has one of the highest tax and social security burdens on labor income (see Figure 49). On top of income tax, workers must pay social security contributions, both of which together account for 39.9 percent of a worker's gross wage earnings – much higher than the OECD average. Both the tax bracket creep and high tax and social security contributions for the middle class create a disincentive to increase earnings through taxable labor. Commensurate with many other OECD countries, Germany also raised the retirement age for full benefits to 67.

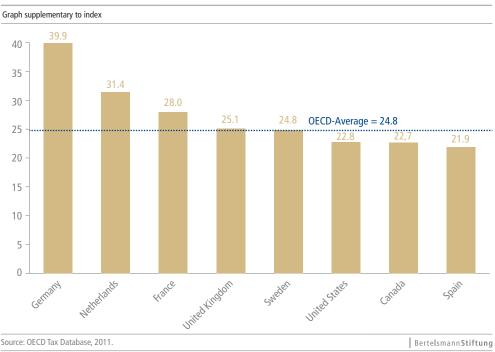


Figure 49: Workers' Social Security and Tax Contributions

The Dutch tax system is progressive, but less so than commonly assumed. In 2011, less than a third of tax revenue came from direct taxes, with a much larger share coming from social security premiums or direct taxes such as the VAT. There are four tax brackets for income taxes, ranging from 33 to 52 percent. The top rate is applied to all incomes above 55.694 Euro. Health insurance premiums do not depend on income but are a flat amount equal for all. Incentives for low-income work are lacking, as the marginal wedge for the unemployed taking up work in many cases lies above 100 percent. It can be more favorable in the Netherlands to remain unemployed rather than enter into low-wage work because welfare benefits surpass low wages. While inactive portions of the population are not accounted for in headline unemployment numbers in any economy, the incentive structures in the Netherlands lend themselves to a low labor market participation rate. Similar to taxation in the United States, Canada's income tax system is fairly progressive, but corrupted by a high number of tax deductions for high-income earners. Some Canadian provinces have introduced flat income tax rates. For lower income brackets, both income tax rates and welfare benefits are fairly low and support their incentive to work. Transfers and tax credits support families with children and the working poor. Some transfer programs, e.g. child benefits, in conjunction with tax rates create high effective tax rates for some low-income earners.



Spain features one of the most progressive income tax systems in Europe, with the tax rate being one of the highest worldwide. Tax evasion, however, is rampant, leaving effective tax rates lower than the formal rates would suggest, especially for employees, much less so for self-employed. Unemployment insurance is provided for a comparatively long time and on relatively lenient terms, leading to a sluggish labor market. Reforms are currently debated. Other social benefits such as family support are underdeveloped and thought to contribute to Spain's low birth rate.

OUTLOOK

The preceding explorative study defines key institutions that do justice to the term of the modern social market economy. It found that of the sample countries, Sweden best exemplifies this economic model. While the index does not directly ascertain causality between the modern social market economy and positive economic performance or crisis resistance, it provides a foundation upon which broader and deeper research can build. More investigation should be carried out in order to investigate correlations and causality with performance indicators. In doing so, however, long-term development rather than short-term performance should be taken into account, in line with ordoliberal approaches.

The study fills a data gap in several institutional areas of the modern social market economy. It also provides a tool for studying the complex, structural interactions of social, political and economic institutions within diverse economic orders. Country reports for each of the 8 economies elaborate on the way in which institutional frameworks interact with each other, either buttressing strengths or exacerbating weaknesses.

Because as a starting point the index focused on national economies as the chosen level of analysis, it only scratches the surface through anecdotal evidence in the country reports on information pertaining to the interaction of institutions between countries. This aspect would prove especially interesting at the level of the EU or EMU during further research.

In general, the great deal of divergence found in the explorative study among countries of the EU and in particular of the EMU raise important questions about the degree of desired versus actual policy and institutional coordination. The member states of the EU defined their common economic order in the Lisbon Treaty as a highly competitive social market economy. However, they lack a clearly outlined and measurable concept for the institutions that constitute this overarching economic order. The index can serve as a benchmark for measuring and monitoring progress toward convergence around the modern social market economy. It serves as a point of departure for discussions about alternative or supplementary indicators that may become apparent through empirical evaluation, learning and a dynamic, iterative redesigning process in dialogue with the member states.

METHODOLOGY

Ulrich van Suntum, Tobias Böhm, Jens Oelgemöller

After having established the close connection between modern scientific concepts and the four categories underlying our notion of a modern social market economy, we constructed a means to measure the degree to which countries conform to it. The aim of this endeavor is to compare countries that differ in many areas and to track their relative performance over time.

To this end, we assembled a comprehensive database that assigns one, or even several numeric variables (indicators), to each of our principles. These variables were then combined to build a hierarchy of indices. First, we constructed an index for each principle that could be interpreted as a numeric summary of how closely a country's institutions conform to our concept of a modern social market economy. In a second step, we aggregated the principle indices into category indices. Finally, these provided the basis for a compound index measuring to which degree the concept of a modern social market economy prevails in each country.

In this chapter, we explain our methodological approach before describing the calculation of results. It concludes with a brief discussion of robustness tests.

DATA SOURCES

Our dataset contains two types of variables: quantitative indicators that we collected from external sources, (see the data description in the appendix for further information) and qualitative indicators. For some dimensions of our principles, publicly available information is extremely scarce, (e.g., for the appropriate degree of manager liability). To incorporate these dimensions into our analysis, we augment our dataset of externally collected data with expert assessments, based on our questionnaire. These ratings have the advantage of being able to capture barely observable nuances of a principle that are related to our notion of a modern social market economy. Furthermore, expert ratings can better take into account certain country specifics, for example their rich institutional environment.

These ratings were obtained from country experts in a consecutive evaluation process. They were chosen to reflect the views of academics and practitioners from both the fields of political science and economics. Each expert completed a questionnaire that asked him to provide numerical assessments for 18 questions. To reduce the scope for misunderstanding, the questionnaire provided detailed explanations to each question. Moreover, for each question we offered five response options, whereas within each response option a high and low numerical assessment was available resulting in ten different numerical values that could be assigned. Moreover, the experts were asked to substantiate their numerical assessments in a country report by referring to concrete examples and / or data if possible.



When completing the questionnaire, the experts could draw upon the quantitative indicators that had already been collected, but could not access the numerical assessments from the other expert, making sure that their ratings were given independently. The country report however, was drafted by one expert and subsequently reviewed by the others who could make suggestions and / or provide supplementary material.

During a discursive process involving the country experts and the coordinators, the exact meaning of each question was clarified and all participants agreed on numerical assessments that properly reflect cross-country differences.

DATA STANDARDIZATION

Since our data are measured on differing scales, we need to standardize them before constructing our index. We decided to standardize all variables to the same scale as the expert ratings, i.e., 1 to 10, with 10 being the best value. Thus, only quantitative indicators that are measured on a scale different from 1 to 10 remain to be standardized (transformed). Our standardization approach proceeds as follows:

1. For categorical variables that have a clearly defined maximum and minimum, e.g., the indicator "Power of the Competition Oversight Authority" which can take on values between 0 and 5, we assign a value of 10 to the highest possible and a value of 1 to the lowest possible value of the original variable. For original values between the maximum and minimum, the transformed value depends linearly on the distance to the maximum, thus the variable "Power of the Competition Oversight Authority" is transformed according to the following formula:

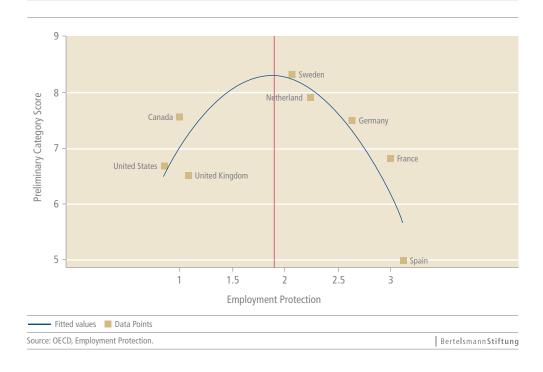
Transformed Value = 1 + 1.8 * (Original Value),

resulting in transformed values being equally spaced between 1 and 10.

- 2. For those variables that do not have a clearly defined maximum and minimum, e.g., continuous variables like "Spending on Childcare and Early Education", we assign a transformed value of 10 to the highest and a transformed value of one to the lowest observed value of the original variable. Again, for intermediate values of the original variable the transformed value depends linearly on the distance to the observed maximum.
- 3. Our data set contains some variables for which we expect a nonlinear relationship with the underlying category or, more generally, our concept of a modern social market economy. While, for example, very low levels of employment protection do not conform to our concept of a modern social market economy, neither do very high levels of employment protection that tend to introduce frictions in the labor market that harm the unemployed. A very similar argument applies to the variables "Active Labor Market Policy" which belongs to the same category and

the variable "Social Security Spending" within the category "Economic and Ecological Sustainability". So, to derive for example the level of employment protection that is most consistent with our concept of a modern social market economy, we proceed in two steps. First, we calculate a preliminary index for the underlying category using only those variables that we consider to be linearly related to the category. In a second step, we estimate the optimal value of the "nonlinear" variable defined as the value of the "nonlinear" variable, which is associated with the highest value of the preliminary index. Finally, based on its distance to the estimated optimal value, we transform the "nonlinear" variable to the 1 to 10 scale. The next figure illustrates our approach.





The figure plots the variable "Employment Protection" against a preliminary index for the category "Social Inclusion" for our sample of eight countries. The blue solid line depicts a quadratic function that best approximates (in a least squares sense) the relationship between the preliminary index and the variable "Employment Protection". Note that the bell shaped form of this curve, which takes on its maximum at an intermediate level of employment protection at around 1.9, confirms our prior intuition that an intermediate level of employment protection conforms best to the category "Social Inclusion". Moreover, transforming the variable based on its distance to the optimal level of 1.9 implies that low and high levels of employment protection can lead to



identical transformed values. For example, while Canada and France have vastly different levels of employment protection (1.06 vs. 2.89), the transformed variable assigns roughly equal values to both countries.

INDEX AGGREGATION

The standardized variables can then be combined into a compound index that measures to which degree institutions posited by the concept of a modern social market economy prevail in our set of countries. Our methodological approach resembles the one used to construct the Ssustainable Ggovernance Iindicators. In order to capture the performance of countries across principles and categories as well, we proceed in three steps.

First, we derive a sub-index for each principle by calculating the arithmetic mean of all variables that are associated with this principle. By giving each variable the same weight we recognize that all variables capture equally important aspects of the underlying principle. Moreover, our method of aggregating variables does not discriminate between expert ratings and quantitative indicators, which means that both types of variables have specific strengths and weaknesses. Note further that using arithmetic means implies that a low value in one variable can be compensated for by a higher value in another, reflecting a substitutive relationship between variables.

In a second step, we calculate the arithmetic mean of the principle sub-indices to derive an index for the associated category. Again, our choice of aggregating sub-indices by building averages reflects the fact that each principle is equally important for the underlying category.

In a last step, we construct the compound index for our concept of a modern social market economy as the arithmetic mean of the category indices.

CALCULATION OF RESULTS

1. Competitive and Efficient Markets

As described above, we first evaluate the performance of each country along each of the three principles before we aggregate the three principle sub-indices to the category index. Since we lack information on the level of subsidies for Sweden, the score of Sweden in the second principle "Effective Price System" is based on the variables "Price Control" and "Administrative and Market Prices" only.

The results for the first category are shown in the following table:

Table 7: Competitive and Efficient Markets

	Open Market	Effective Price System	Competition	Category Score		
	 Controls on Capital Movement Freedom of Migration Barriers to Market Access Product Market Regulation 	 Price Control Admin. Prices vs. Market Prices Subsidies an other Transfers 	Media PluralismCompetitionOversight Authority	Arithmetic Mean of Open Market Effective Price System Competition		
Canada	8.14	7.33	6.50	7.32		
France	7.23	8.17	6.50	7.30		
Germany	7.27	5.67	9.00	7.31		
Netherlands	8.16	5.59	7.50	7.08		
Spain	7.64	4.42	7.00	6.35		
Sweden	8.79	8.01	7.00	7.93		
United Kingdom	7.95	8.67	8.00	8.21		
United States	7.94	7.31	9.00	8.08		

Source: Own calculations based on questionaire and external sources (see Apendix).

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Sweden performs best in the first principle, which is due to its open factor markets and its relatively low barriers to entry and exit. Its average of 8.79 on a scale from 1 to 10 in the four variables assigned to the principle "Open Market" corresponds to 86.6% (=(8.79-1)/9) of the maximally attainable score. This contrasts sharply with the 69.2% achieved by France, the lowest performing country, which leads to a difference between Sweden and France in the range of 3 standard deviations. The second principle, "Effective Price System", exhibits considerable variation. While Spain performs poorly across all three indicators, the low performance of Germany and the Netherlands can be explained by the high level of subsidies in both countries. In "Competition", the last principle, the variance is again high whereas especially Germany and the United States receive a very high score, resulting from the high level of media pluralism in Germany and highly effective competition enforcement authority in the US.

The last column averages the scores of the three principles and reveals that overall, the UK performs best in the first category, followed by the US and Sweden. While the differences between the first three countries are small, the gap between the third and the fourth country Canada already exceeds 1 standard deviation (which is 0.57). Only Spain performs markedly worse, falling short from the country on seventh place by almost 1.5 standard deviations.



2. Efficient Property Rights

The scores of the second category, "Efficient Property Rights", which consists of three principles are shown in the following table.

Table 8: Efficient Property Rights

	Property Rights	Freedom of Contract	Liability	Category Score		
	Investor ProtectionPatent ProtectionIntellectual Property Rights	 Occupational Choice Market Transparancy and Consumer Protection Judicial Review 	Private InsolvenceRatio Medium sized to Total CompaniesManager Liability	Arithmetic Mean of Eff. Property Rights Freedom of Contract Liability		
Canada	8.07	8.67	8.33	8.36		
France	7.24	9.00	5.67	7.30		
Germany	6.95	9.00	8.67	8.21		
Netherlands	7.04	8.67	7.33	7.68		
Spain	6.22	8.00	7.00	7.07		
Sweden	7.57	10.00	9.00	8.86		
United Kingdom	8.02	8.33	6.00	7.45		
United States	8.03	8.67	7.00	7.90		

Source: Own calculations based on questionaire and external sources (see Apendix).

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The score in the first principle, "Property Rights", is based variables which capture the level of minority shareholder protection against misuse of corporate assets and intellectual property rights protection. The Anglo-Saxon countries have the highest score in the first principle since they exhibit the highest degree of investor protection which may reflect the long tradition of equity financing in these countries. By contrast, countries which traditionally rely more heavily on debt financing score considerably worse here. The second principle is the only one where the best performing country, Sweden in this case, attains the highest possible score. The performance of all the remaining countries, however, exhibits only very little variation, which is not surprising given that our sample comprises only highly developed countries. We observe more variance however in the principle "Liability". The UK's comparatively bad score can be explained by its unbalanced firm size distribution while the performance of the US suffers from the inappropriate level of manager liability.

Combining the scores of these three principles reveals that Sweden exhibits the most efficient property rights, leading the ranking by almost 1 standard deviation ahead of Canada. The low performance of France and Spain seems to be driven by the poor level of property rights protection and liability in particular. Again, the differences between the countries at the top and at the bottom are sizable and amount to slightly more than 3 standard deviations (which is 0.56).

3. Economic and Ecological Sustainability

The following table contains the scores for the third category.

Table 9: Economic and Ecological Sustainability

	Financial Stability	Consistency of Policy	Efficient Environment Protection	Category Score		
	 Central Bank Independence Depth of Credit Information Index Public and Private Credit Registry Coverage Prevention of Too- Big-to-Fail Bank Capital to Assets Ratio Equity Ratio of Companies 	 Control of Financial Consolidation Extent of Staff Training Pension System Linked with Life Expectancy Social Security Spending R&D Spending 	 Market Economy Instruments Environmental Policy Revenue from Green Taxes 	Arithmetic Mean of Financial Stability Consistency of Policy Efficient Environment Protection		
Canada	6.71	4.48	4.14	5.11		
France	5.59	5.23	4.70	5.17		
Germany	6.64	8.36	6.56	7.19		
Netherlands	5.73	3.78	7.33	5.61		
Spain	5.98	1.68	4.92	4.19		
Sweden	6.71	7.47	6.87	7.02		
United Kingdom	6.30	5.55	6.14	5.99		
United States	7.25	6.19	3.67	5.70		

Source: Own calculations based on questionaire and external sources (see Apendix)

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The US leads the ranking in the first principle "Financial Stability" followed by Sweden and Germany. Note that although all countries belonging to the Eurozone have the same score in the variable "Central Bank Independence", the scores in the first principle exhibit a relatively high amount of variation owing to large differences in the level of credit information availability. The second principle contains the variable "Social Security Spending", which we suspect to be related in a nonlinear way to the category "Economic and Ecological Sustainability". To transform this variable, we first estimate the optimal value that conforms best to the category. We indeed find that the relationship between our third category and "Social Security Spending" is hump shaped whereby a social security spending level of 34.5 percent of GDP is associated with the highest level of the preliminary index for this category. The transformation of this "nonlinear" variable reveals that Sweden's amount of social security spending comes closest to the estimated optimum. Overall, Germany which is the only country with a constitutionally stipulated public debt brake, making it



score high on the variable "Control of Financial Consolidation", leads the ranking in the second principle followed by Sweden. Finally, the central and northern European countries excel in the third principle. The top position of the Netherlands seems to result in particular from its very high revenues from environmentally related taxes.

Overall, our analysis shows that Germany has the highest level of "Economic and Ecological Sustainability" followed by Sweden and the UK. We observe a high level of variation in this category. The difference between the first and the third country (the UK) already amounts to more than 1 standard deviation and the difference between the best and the worst performing country (Spain) exceeds 3 standard deviations.

4. Social Inclusion

Our analysis of the last category "Social Inclusion" is based on two principles. Note that the first principle "Effective Labor Markets" contains two variables, "Active Labor Market Policy" and "Employment Protection" for which we confirm a nonlinear bell shaped relationship with the category "Social Inclusion".

Table 10: Social Inclusion

	Effective Labor Markets	Social Mobility	Category Score	
	 Active Labor Market Policy Employment Protection Legislation Prevention of Duality Employer-Employee Parity Effective Labor Market Programs 	 Social Inclusion (SGI) Non-Discrimination (SGI) Public Spending on Childcare and Early Education Education Structures Compulsory Unemployment Insurance Guaranteed Minimum Social Security Income Taxation and Incentives to Work 	Arithmetic Mean of Effective Labor Markets Social Mobility	
Canada	5.75	7.14	6.45	
France	4.99	7.57	6.28	
Germany	6.82	7.14	6.98	
Netherlands	8.05	7.86	7.95	
Spain	2.74	6.29	4.51	
Sweden	8.10	8.00	8.05	
United Kingdom	4.32	7.71	6.02	
United States	4.32	7.00	5.66	

Source: Own calculations based on questionaire and external sources (see Apendix).

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Since the first principle exhibits markedly higher variation than the second, our results indicate that differences in terms of social inclusion stem mainly from differences in the effectiveness of labor market institutions. The low performing countries in the first principle all appear to spend too little on active labor market policies and lack effective labor market programs. However, we also observe some heterogeneity among those countries at the bottom of the first principle ranking. For example, although both the US and France score very low on "Employment Protection Legislation", the level of employment protection in France is found to be excessively high while employment protection in the US is too low to be compatible with our notion of a modern social market economy. In contrast to the first principle, the second exhibits little variation across countries, which is also true for the individual variables assigned to "Social Mobility".

Overall, our analysis shows that while Sweden and the Netherlands feature the highest levels of social inclusion, the US, the UK and also France perform relatively poorly. We find the lowest level of social inclusion for Spain, which can be attributed to its particularly poor labor market institutions.

The Compound Index

Finally, we combine the four category indices to form a compound index that measures to what extent the institutions in our set of countries are compatible with the concept of a modern social market economy.

Table 11: Compound Index

Country	Market Allocation		Efficient Property Rights		Sustainability		Social Inclusion		Compound Index	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Canada	7.32	4	8.36	2	5.11	7	6.45	4	6.81	6
France	7.30	6	7.30	7	5.17	6	6.28	5	6.51	7
Germany	7.31	5	8.21	3	7.19	1	6.98	3	7.42	2
Netherlands	7.08	7	7.68	5	5.61	5	7.95	2	7.08	3
Spain	6.35	8	7.07	8	4.19	8	4.51	8	5.53	8
Sweden	7.93	3	8.86	1	7.02	2	8.05	1	7.96	1
United Kingdom	8.21	1	7.45	6	5.99	3	6.02	6	6.92	4
United States	8.08	2	7.90	4	5.70	4	5.66	7	6.84	5

Source: Own calculations based on questionaire and external sources (see Apendix).

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Our results indicate that Sweden and Germany exhibit institutions that come closest to our notion of a social market economy. These two countries are followed by a set of four, the Netherlands, the UK, Canada and the US, which perform quite similarly and score approximately 1.5 standard deviations (=0.65) lower than Sweden. France, which scores more than 2 and Spain with a score almost 4 standard deviations below Sweden, are at the bottom of our ranking.

Interestingly, while France and Spain score low across all our categories, the relative performance of all other countries varies substantially across categories. Moreover, on average, scores are lowest in the third category which is related to sustainable policy making. This finding can be attributed to uniformly low performance in the principle "Efficient Environment Protection" which measures the level of ecological sustainability.

ROBUSTNESS CHECKS

We performed various robustness checks to assess the sensitivity of our results to the assumptions we made in the construction the compound index.

First, we transform all our variables to z-scores, (i.e., each variable is measured in standard deviations from its mean) to gauge the impact of our chosen mode of variable standardization. The next table contains both country ranks after the z-transformation and the changes in country ranks relative to the baseline compound index.

Table 12: Robustness Tests

Country	Robustness Tests							
	Compund Index	Rank	Z Score	Rank	Rank Difference	Geom. Mean	Rank	Rank Difference
Canada	6.81	6	0.12	4	-2	5.92	7	1
France	6.52	7	-0.35	7	0	5.97	6	-1
Germany	7.40	2	0.35	2	0	6.89	2	0
Netherlands	7.08	3	0.18	3	0	6.47	3	0
Spain	5.53	8	-0.85	8	0	4.73	8	0
Sweden	7.96	1	0.79	1	0	7.43	1	0
United Kingdom	6.91	4	-0.15	6	2	6.39	4	0
United States	6.84	5	-0.07	5	0	6.04	5	0

Source: Own calculations based on questionaire and external sources (see apendix).

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Observe that the z-transformation has an impact on the relative position of some countries. In particular, Canada and the UK switch positions. Note however, that both countries belong to the middle group, which had very similar scores in our baseline analysis. Moreover, note that the z-transformation preserves the size of the score differences between countries. For example, the difference between the best and worst performing country still amounts to almost 4 standard deviations.

In a second robustness check, we combine category indices multiplicatively by calculating their geometric mean to derive the compound index. While this helps to assess the influence of our chosen mode of variable aggregation, there is also a substantive reason for this exercise. In particular, one shortcoming of constructing our indices as an arithmetic mean is that index scores can substitute perfectly (i.e. one for one) for each other. This property does not fully square with Eucken's original work that emphasized the interdependency of both the principles and the categories and posited that a good performance in each principle and category is essential for the functioning of a modern social market economy. Put differently, a lower performance in one principle can only imperfectly be offset by an equivalent increase in the performance of another principle. This idea is well captured by aggregating principle scores by geometric means.

To see that, consider the fourth category which consists of two principles. If I_1 and I_2 denote the principle indices for "Effective Labor Markets" and "Social Mobility", the category index would now be given by

$$I_{Soc.Incl.} = \sqrt{\left(I_1 \cdot I_2\right)}$$

Now consider the following hypothetical scores for two countries: Country A scores 7 in both principles while country B scores 5 in the first and 9 in the second principle. While the arithmetic means of principle scores are the same for these two countries, country A performs better if the category index is calculated as a geometric mean ($\sqrt{7 \cdot 7} = 7 > \sqrt{5 \cdot 9} = 6.7$). Thus, more uneven principle scores tend to lead to lower category scores. Of course, the same argument applies to the aggregation of category index scores to the compound index.

To capture this kind of imperfect substitutability between principle and category scores, we thus calculated the category indices as the geometric mean of principle indices and the compound index as the geometric mean of the category indices. The results in the table show that our ranking is hardly affected by our chosen mode of index aggregation. However, country scores are slightly lower compared to our baseline results owing to the imperfect substitutability between category scores. For example, the score for the US decreases considerably (and more strongly than, e.g. the score of Sweden) due to the more uneven performance of the US across categories.



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APPENDIX

DATA DESCRIPTIONS FROM EXTERNAL SOURCES

1. Competitive and Efficient Markets

Product Market Regulation

Source: OECD. Short description: http://www.oecd.org/dataoecd/32/9/42131723.pdf

OECD, http://www.oecd.org/economy/pmr

Description: "The OECD Indicators of Product Market Regulation (PMR) are a comprehensive and

internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. They measure the economy-wide regulatory and market environments [...];

they are consistent across time and countries.

The indicators cover formal regulations in the following areas: state control of business enterprises; legal and administrative barriers to entrepreneurship; barriers to

international trade and investment."

Scale: From 0 (least restrictive) to 6 (most restrictive).

Year: 2008

Price Control

Source: Economic Freedom of the World (EFW), Annual Report.

http://www.freetheworld.com/2011/reports/world/EFW2011_complete.pdf

Description: "The more widespread the use of price controls, the lower the rating. The survey data

of the International Institute for Management Development's (IMD) World Competitiveness Yearbook (various editions) were used to rate the countries (mostly developed economies) covered by this report. For other countries, other sources were used to categorize countries. Countries were given a rating of 10 if no price controls or marketing boards were present. When price controls were limited to industries where economies of scale may reduce the effectiveness of competition (e.g., power generation), a country was given a rating of 8. [...] A rating of zero was given when there was widespread use of price controls throughout various sectors of the economy." (http://www.freetheworld.com/2011/reports/world/EFW2011_complete.pdf, p. 200.)

Scale: From 0 (widespread use of price control) to 10 (no price control).

Administered Prices vs. Market Prices

Source: World Governance Indicator with external Source: Institutional Profiles Database

http://info.worldbank.org/governance/wgi/pdf/IPD.xlsx

 $Description: \\ \hbox{``The database was built by researchers from the French Ministry for the Economy,} \\$

Industry and Employment (MINEIE) and the French Development Agency (AFD) and was constructed from a world survey conducted with MINEIE and AFD agencies present in the countries covered in the database. The administrative Prices include subsidies on prices of primary products. The indicator presents the proportion of administered prices: Administered prices and market prices varying from 1 = large

proportion to 4 = very small proportion or nil."

Scale: 1 (administered prices) to 4 (market prices)

Year: 2010

Subsidies and other Transfers (% of expense)

Source: World Development Indicators, World Bank. http://data.worldbank.org/indicator/

GC.XPN.TRFT.ZS

Description: "Subsidies, grants, and other social benefits include all unrequited, nonrepayable

transfers on current account to private and public enterprises; grants to foreign governments, international organizations, and other government units; and social security, social assistance benefits, and employer social benefits in cash and in kind."

Scale: Metric.

Year: 2010 (France, Germany, Netherlands, UK: 2009)

Media Pluralism

Source: SGI, Bertelsmann Stiftung.

http://www.sgi-network.org/index.php?page=indicator_quali&indicator=S2_2

Description: "Does the structure of media ownership ensure a pluralism of opinion? Texts + scores

are based on independent assessments by two experts. Results were adjusted for

cross-national consistency by the regional coordinator and SGI board."

Scale: From 1 (strong governmental influence) to 10 (free media and pluralism).



Power of Competition Oversight Authority

Source: Global Competition Review.

www.gvh.hu/domain2/files/modules/module25/71971CF24AFBE45D.pdf

Description: "The global competitive report analyses over 100 competition authorities. Among

other things the size and the structure of the institution is measured. The structure of the staff, existence of sector-specialist, and the number of economist within the

staff are noted. Here: Best performing authority per country"

Scale: These indicators are fitted to a five-star-ranking, 5 excellent.

Year: 2006

2. Efficient Property Rights

Investor Protection

Source: World Bank: Doing Business.

http://www.doingbusiness.org/data/exploretopics/protecting-investors

Description: "Doing Business measures the strength of minority shareholder protections against

directors' misuse of corporate assets for personal gain. The indicators distinguish 3 dimensions of investor protections: transparency of related-party transactions (extent of disclosure index), liability for self-dealing (extent of director liability index) and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index). The data come from a survey of corporate and securities lawyers and are based on securities regulations, company laws, civil procedure codes and court rules of evidence. The ranking on the strength of investor protection index is the simple average of the percentile rankings on its component indicators." (http://www.

doingbusiness.org/methodology/protecting-investors)

Scale: The index ranges from 0 to 10, (with higher values indicating more investor protec-

tion).

Judicial Review

Source: SGI, Bertelsmann Stiftung.

http://www.sgi-network.org/index.php?page=scores&indicator=S4_2

Description: "Do independent courts monitor whether the government and administration act in

compliance with the law? Judicial review evaluates the strength of scrutiny given by courts to the executive's actions and norms. The efficacy of this review in turn depends on the appointment process for high justices themselves – judges put in place through a transparent, cooperative process can be better trusted to render independent verdicts than those appointed solely by a single government actor, for

example."

Scale: From 1 (Courts are biased for or against the incumbent government, and lack effec-

tive oversight) to 10 (Independent courts review executive actions, ensuring legal

compliance).

Year: 2011

Patent Protection

Source: Park Index of Patent Rights.

http://www.american.edu/cas/faculty/wgpark/upload/IPP-Research-Policy-

May-2008-3.pdf

Description: A country's rank in patent strength is based on five extensive criteria: coverage,

membership in international treaties, restrictions on patent rights, enforcement, and

duration of protection.

Scale: From 0 (worst) to 5 (optimal).

Year: 2008

Intellectual Property Rights

Source: World Economic Forum's 2011-2012 Global Competitiveness Index, p. 391. http://

www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf

Description: Survey participants were asked to comment on the question "how weak or strong are

intellectual property protection and anti-counterfeiting measures in your country"

Scale: From 1 (very weak) to 7 (very strong).

Year: 2010-2011



3. Economic and Ecological Sustainability

Credit Information - Aggregated indicator:

www.doingbusiness.org/methodology/getting-credit

Depth of Credit Information Index

Source: World Bank: Doing Business.

http://data.worldbank.org/indicator/IC.CRD.INFO.XQ

Description: "Credit depth of information index measures rules affecting the scope, accessibility,

and quality of credit information available through public or private credit registries."

Scale: 0-6: higher values indicating the availability of more credit information.

Year: 2011

Public Credit Registry Coverage

Source: World Bank: Doing Business.

http://data.worldbank.org/indicator/IC.CRD.PUBL.ZS

Description: "Public credit registry coverage reports the number of individuals and firms listed in

a public credit registry with current information on repayment history, unpaid debts,

or credit outstanding."

Scale: The number is expressed as a percentage of the adult population.

Year: 2011

Private Credit Bureau Coverage

Source: World Bank: Doing Business.

http://data.worldbank.org/indicator/IC.CRD.PRVT.ZS

Description: "Private credit bureau coverage reports the number of individuals or firms listed by

a private credit bureau with current information on repayment history, unpaid debts,

or credit outstanding."

Scale: The number is expressed as a percentage of the adult population.

Bank Capital to Assets Ratio (%)

Source: World Development Indicators.

http://data.worldbank.org/indicator/FB.BNK.CAPA.ZS

Description: "Bank capital to assets is the ratio of bank capital and reserves to total assets. Capital

and reserves include funds contributed by owners, retained earnings, general and special reserves, provisions, and valuation adjustments. Capital includes tier 1 capital (paid-up shares and common stock), which is a common feature in all countries' banking systems, and total regulatory capital, which includes several specified types of subordinated debt instruments that need not be repaid if the funds are required to maintain minimum capital levels (these comprise tier 2 and tier 3 capital). Total

assets include all nonfinancial and financial assets."

Scale: Percentage.

Year: 2011 (France, Spain, UK: 2010; Sweden 2009)

Control of Financial Consolidation

Source: OECD: Restoring Public Finances.

http://www.oecd.org/dataoecd/51/58/47558957.pdf

Description: Existence of a debt brake or other rules anchored in the Constitution

Scale: Dummy-Variable (0 | 1).

Year: 2011

Extent of Staff Training

Source: World Economic Forum: Global Competitiveness Report, p. 449.

http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf

Description: "To what extent do companies in your country invest in training and employee devel-

opment?"

Scale: 1 = hardly at all; 7 = to a great extent.

Year: 2010-2011



Pension Systems Linked with Life Expectancy

Source: OECD: Pensions at a Glance.

http://www.oecd-ilibrary.org/docserver/download/fulltext/8111011ec009.pdf? expires=1346328652 & id=id & accname=guest & check sum=0620F4C53C96025A3A3D1F34

1DA1A590 (p. 84)

Description: Pension systems around the world have become much more diverse. In Pensions at a

Glance there is an overview of those that involve an automatic link between pensions $% \left\{ 1\right\} =\left\{ 1\right$

and life expectancy, with different ways of linking pensions to life expectancy.

Scale: Dummy-Variable (0 | 1).

Year: 2011

Social Security Spending

Source: OECD; (Society at a Glance, 2009, pp. 98, 99)

 $http://www.oecd-ilibrary.org/docserver/download/fulltext/8109011e.pdf?expires=13\\48232073\&id=id\&accname=guesg\&checksum=DF1C2AD91FA930B35E61492862B6$

5C0A

Description: "A comprehensive account of the total amount of resources that each OECD country

devotes to social support has to account both public and private social expenditures, and the extent to which the tax system affects the effective amount of support pro-

vided."

Scale: Percentage of NNI at factor costs, 2005

Year: 2005

R&D Spending

Source: OECD; Main Science and Technology Indicators, OECD Science, Technology and R&D

Statistics

http://www.oecd-ilibrary.org/science-and-technology/gross-domestic-expenditure-

on-r-d_2075843x-table1

Description: Gross domestic expenditure on R&D as a percentage of GDP

Scale: Percentage of GDP Year: 2010 (USA: 2009)

Environmental Policy

Source: SGI, Bertelsmann Stiftung.

http://www.sgi-network.org/index.php?page=indicator_quali&indicator=S17_1

Description: "Does environmental policy preserve and protect resources and the quality of the

environment?"

From 1 (Policies largely fail to protect natural resources and environmental quality)

to 10 (Policies protect and preserve natural resources and enhance environmental

quality).

Year: 2011

Scale:

Revenue from Green Taxes

Source: OECD: http://www2.oecd.org/ecoinst/queries/PercentTaxes.pdf, or http://www2.

oecd.org/ecoinst/queries/TaxInfo.htm

Description: Environmentally related taxes are defined as any compulsory, unrequited payment

to general government levied on tax-bases deemed to be of particular environmental relevance. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments. Requited compulsory payments to the government, such as fees and charges that are levied more or less in proportion to services provided (e.g. the amount of wastes collected and treated),

are also included.

Scale: Percent of total tax revenue.

Year: 2010 (Canada, Netherlands: 2009)

4) Social Inclusion

Employer Contribution to Unemployment Insurance

Source: http://www.oecd.org/els/socialpoliciesanddata/40262531.xls.

 $Description: Is \ there \ a \ compulsory \ unemployment \ insurance? \ (For \ a \ 40-year-old \ single \ worker$

without children, with a 22-year employment record).

Scale: Dummy (1 (yes) | 0 (no or voluntary)).



Social Inclusion

Source: SGI; Bertelsmann Stiftung.

http://www.sgi-network.org/index.php?page=indicator_quali&indicator=S11_1

Description: "Do welfare policies foster equal opportunity in society and prevent poverty?"

Scale: From 1 (Policies exacerbate unequal opportunities and exclusion from society) to 10

(Policies effectively foster societal inclusion and ensure equal opportunities).

Year: 2011

Public Spending on Childcare and Early Education

Source: OECD; Family Database.

http://www.oecd.org/dataoecd/45/27/37864512.pdf

Description: Public expenditure on childcare and early educational services including all public

financial support (in cash, in-kind or through the tax system for families with children participating in formal daycare services (e.g. crèches, day care centers and family day care for children under 3) and pre-school institutions (including kindergartens and day-care centers which usually provide an educational content as well as traditional

care for children aged from 3 to 5, inclusive).

Scale: Percent of GDP.

Year: 2007

Non-Discrimination

Source: SGI; Bertelsmann Stiftung.

http://www.sgi-network.org/index.php?page=scores&indicator=S3_3

Description: "How effectively does the state protect against discrimination?"

Scale: From 1 (The state does not provide effective protection. Discrimination is wide-

spread,) to 10 (State institutions actively prevent discrimination. Discrimination

extremely rare).

Active Labor Market Policy per Unemployed

Source: OECD: http://stats.oecd.org/Index.aspx?DataSetCode=LMPEXP

Description: Public expenditure on active labor market policies in US \$ per unemployed, constant

prices, constant PPPs (Public expenditure on active labour market programs as a percentage of GDP*Gross domestic product (expenditure approach)/Unemployment

(total))

Scale: US \$.

Year: 2010 (UK: 2009)

Employment Protection Legislation

Source: OECD

http://www.oecd.org/document/11/0,3746,en_2649_37457_42695243_1_1_1_

37457,00.html

Description: "The OECD employment protection indicators are compiled from 21 items covering

three different aspects of employment protection:" dismissal of workers, costs for

collective dismissals and regulation of temporary contracts

Scale: Scale from 0 (least stringent) to 6 (most restrictive).



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