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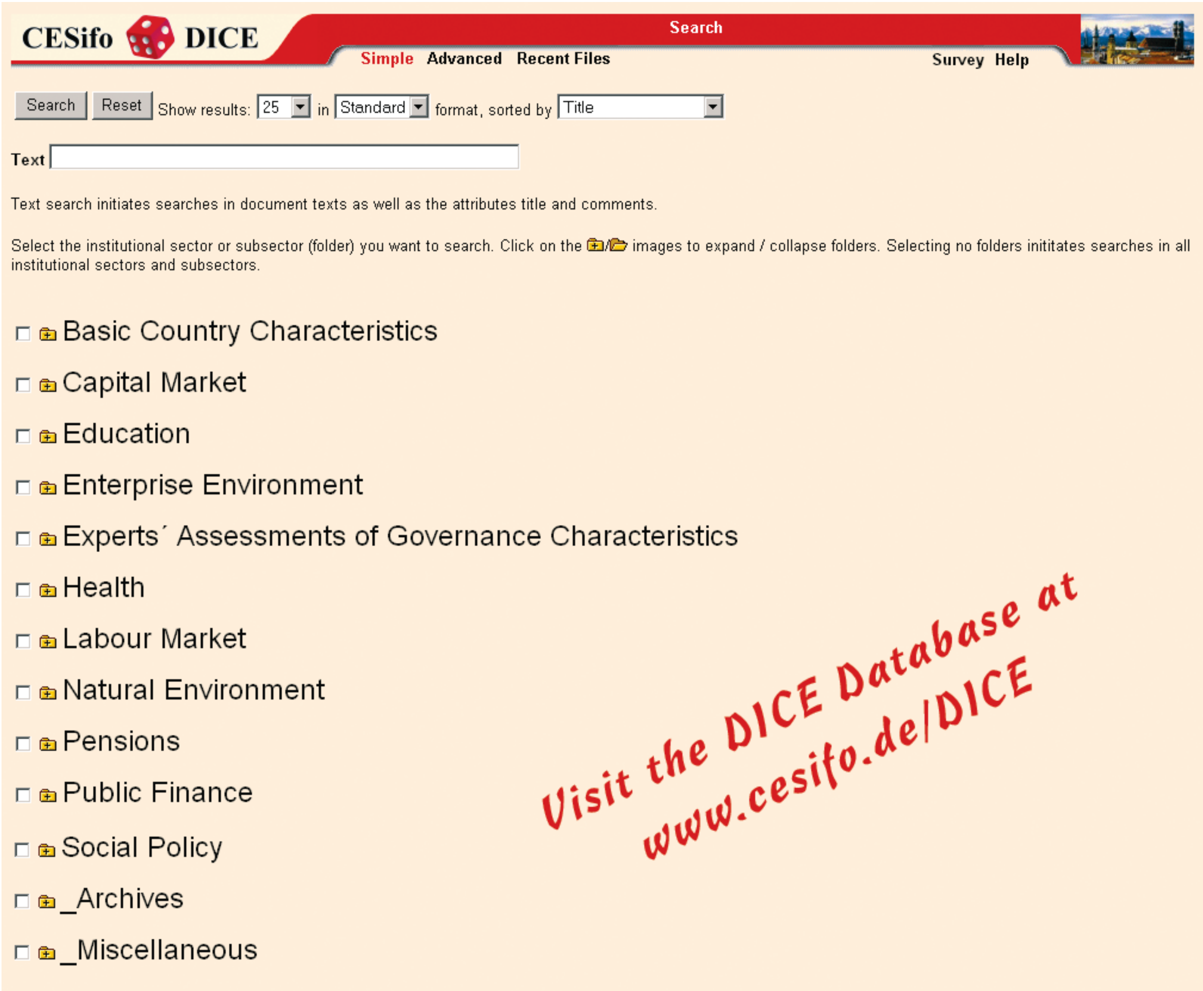

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BANKRUPTCY AND BANKRUPTCY PROCEDURES

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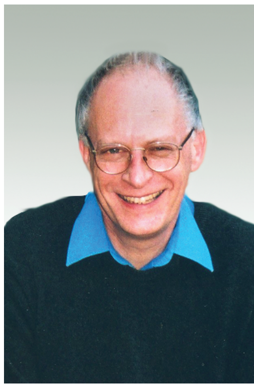
Bankruptcy and Bankruptcy Procedures

Different Approaches to Bankruptcy*

Oliver Hart**

In the last fifteen years or so, lawyers working in law and economics and economists with an interest in legal matters have turned their attention to the topic of bankruptcy. A large amount of work has resulted, both theoretical and empirical, some of which has been concerned with the functioning of existing bankruptcy procedures and some with bankruptcy reform. Although researchers in this area have expressed different views, I believe that one can identify a consensus on certain issues, e.g., the goals of bankruptcy and some of the characteristics of an efficient bankruptcy procedure. (There is probably less agreement about exactly what the best bankruptcy procedure is or how well existing systems around the world function.) In this paper I will focus on this consensus because I believe it is useful in guiding countries with poorly developed bankruptcy procedures in efforts to improve them.[1] One point I will stress is that it is unlikely that "one size fits all". That is, although some bankruptcy procedures can probably be rejected as being manifestly bad, there is a class of procedures that satisfy the main criteria of efficiency. Which procedure a country chooses or should choose may then depend on other factors, e.g., the country's institutional structure and legal tradition. One can also imagine a country choosing a menu of procedures and allowing firms to select among them.



It is important to recognize that bankruptcy reform should not be seen in isolation: it may be necessary to combine it with legal and other reforms, e.g., the training of judges, improvements in corporate governance and the strengthening of investor rights[2], and possibly even changes in the international financial system.[3] I will not discuss these issues here, although they should be borne in mind in what follows.[4] Also, I will deal only with company bankruptcy and not with the bankruptcy of individuals or governments (local, state or national), even though some of the issues raised are similar.

The need for a bankruptcy procedure

Firms take on debt for several reasons. Probably the most important is that they wish to commit to pay out some of their future cash flow. Whatever the reason, there will be circumstances in which a firm will be unable to pay its debts. Bankruptcy law is concerned with what happens in such situations.

In the absence of a bankruptcy law, a creditor has two main legal remedies at her disposal in countries like the U.S., the U.K., and the rest of Western Europe. First, in the case of a secured loan, the creditor can seize the assets that serve as collateral for the loan. Second, in the case of an unsecured loan, the creditor can call on the court to sell some of the debtor's assets.

This method of debt collection runs into difficulties when there are many creditors and the debtor's assets do not cover his liabilities. Under these conditions, creditors will try to be first to recover their debts. This race by creditors may lead to the dismantlement of the firm's assets, and to a loss of value for all creditors. Given this, it is in the collective interest of creditors that the disposition of the debtor's assets be carried out in an orderly manner, via a bankruptcy procedure.

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** I would like to thank Philippe Aghion, John Moore, Andrei Shleifer, Joseph Stiglitz, and, especially, Fritz Foley for helpful comments.
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[1] My approach will be mainly normative: I will have very little to say about why bankruptcy laws have developed in the way they have. On this, see Berglöf and Rosenthal (1998) and Franks and Sussman (1999).

[2] See LaPorta et al. (1998).
[3] See Rowat and Astigarraga (1999) and the 1999 IMF report.
[4] Among other things, the IMF report suggests that one way to reduce financial distress might be for a firm and its bondholders to include debt renegotiation provisions in their bond contracts. This may be thought of as a private bankruptcy procedure – see below.

In principle, individuals could arrange bankruptcy procedure themselves. That is, a debtor could specify as part of a debt contract what should happen in a default state. Writing such a contract may be difficult, however, given that the debtor may acquire new assets and creditors as time passes. Moreover, the empirical evidence – both the fact that firms rarely write such contracts and that almost all countries have at least a primitive state-provided bankruptcy procedure – suggests that we cannot rely on this "private" solution in practice. In other words, there seems to be a clear case for the govemment at least to provide an "off the shelf" bankruptcy procedure, i.e., one that the parties can use in the event that they do not write their own.

Goals of a bankruptcy procedure

It is hard to derive an optimal bankruptcy procedure from first principles, given that economists do not at this point have a satisfactory theory of why parties cannot design their own bankruptcy procedures (i.e., why contracts are incomplete). In spite of this, economic theory can guide us as to the characteristics of a good procedure.

First, there is a strong argument that a bankruptcy procedure should deliver an ex post efficient outcome, that is, it should maximize the total value (measured in money terms) available to be divided between the debtor, creditors and possibly other interested parties, e.g., workers. (We call this Goal 1.) Specifically, a firm should be reorganized, sold for cash as a going concern, or closed down and liquidated piece-meal according to which of these generates the greatest total value. The reasoning is that, other things equal, more is preferred to less; in particular, if a procedure can be modified to deliver higher total value, then, given that each group receives an adequate share of this value (see the discussion of Goal 3 below), everyone will be better off.

Goal 1: Ceteris paribus, a good bankruptcy procedure should deliver an ex post efficient boutcome.

Although Goal 1 will be readily accepted by most economists, it is worth noting that it goes against much informal thinking on the topic. lt is often taken for granted that debtors will favor a pro-debtor bankruptcy procedure and creditors will favor a pro-creditor bankruptcy procedure. The informal view misses the point that if, say, a pro-debtor bankruptcy procedure is chosen, then debtors will have to pay higher interest rates to compensate creditors in non bankruptcy states.

The second goal concems ex ante efficiency. As we have noted, probably the most important reason a firm raises funds by borrowing money rather than, say, issuing shares is to commit itself to pay out future cash flow. For such a commitment to have any force, there has to be some punishment if the commitment is not fulfilled. This punishment can take various forms. Shareholders can be punished by having their claims wiped out (see Goal 3 below). Managers can be punished by making it less likely that they can hold onto their jobs. But without any adverse consequenees at all, there is very little incentive to pay your debts.

Goal 2: A good bankruptcy procedure should preserve the bonding role of debt by penalizing managers and shareholders adequately in bankruptcy states.

Next we turn to the way value is divided among the claimants. A simple way to penalize shareholders in bankruptcy is to respect the absolute priority of claims (i.e., senior creditors are paid off first, then junior creditors, and finally shareholders). Adhering to absolute priority of claims has other advantages. First, it helps to ensure that creditors receive a reasonable return in bankruptcy states, which encourages them to lend. Second, it means that bankruptcy and non-bankruptcy states are not treated as fundamentally different: contractual obligations entered into outside bankruptcy are respected to the full extent possible inside bankruptcy.

However, an argument can be made against absolute priority. As a number of scholars have pointed out, if shareholders receive nothing in bankruptcy, then management, acting on behalf of shareholders, will have an incentive to "go for broke," i.e., they will do anything to avoid bankruptcy, including undertaking highly risky investment projects and delaying a bankruptcy filing. For this reason, there may be a case for reserving some portion of value in bankruptcy for shareholders.

Goal 3: A good bankruptcy procedure should preserve the absolute priority of claims, except that some portion of value should possibly be reserved for shareholders.

Existing procedures

Although there are many different bankruptcy procedures around the world, they fall into two main categories: an asset sale (or cash auction) on the one hand and structured bargaining on the other hand.

Asset Sale (Cash Auction)

The simplest bankruptcy procedure, some version of which can be found in almost all countries, consists of a sale of the firm's assets, supervised by a trustee or receiver. Often the assets are sold piecemeal; in other words, the firm is liquidated (having been closed down). Sometimes, however, the firm is sold as a going concern. Whichever occurs, the receipts from the sale are distributed among former claimants according to absolute priority (usually secured debt, then varlous priority claims, then unsecured debt, then subordinated debt and finally equity); however, absolute priority is not an essential part of the procedure.

From a theoretical perspective, a cash auction has an attractive simplicity. If capital markets work well, the procedure should generate an ex post efficient outcome. In particular, if the firm is worth more as a going concern than liquidated, a bid to keep the firm together will dominate a set of independent bids for the parts. On the other hand, if the firm is worth more closed down, then a set of independent bids for the parts will dominate a bid for the whole.

A cash auction has another advantage. There is no haggling among the claimants about who should get what: the firrn is transformed into a pile of cash, which is distributed according to absolute priority (or some other agreed-in-advance rule).

Although there is little clear-cut evidence about whether cash auctions for firms work well in practice[5], there is plenty of indirect evidence suggesting that debtors, creditors and society generally do not trust them. There have been discussions in many countries in the last fifteen years or so about bankruptcy reform, with new procedures being introduced in some countries, but, as far as I am aware, all of the discussion and changes have been in the direction of introducing a Chapter 11-type structured bargaining procedure (see below); none of the movement has been in the direction of cash auctions.[6] In fact, I'm not aware of any group – management, shareholders, creditors, or workers – who is pushing for cash auctions. Thus, it seems to be a fact of life that countries are not prepared to rely on cash auctions as a bankruptcy procedure.

Structured bargaining

Because of the concern about the effectiveness of cash auctions, a number of countries have developed alternative procedures based on the notion of structured bargaining. The idea behind these procedures is that the firm's claimants are encouraged to bargain about the future of the firm – whether it should be liquidated or reorganized and how its value should be divided-up according to predetermined rules. The leading example of a structured bargaining procedure is Chapter 11 of the U.S. Bankruptcy Code; however, U.K. administration is based on similar ideas, as are procedures in France, Germany, and Japan.

The basic elements of Chapter 11 are as follows. A stay is put on creditors' claims (that is, they are frozen: no creditor is allowed to seize or sell any of the firm's assets during the process); claim holders are grouped into classes according to the type of claim they have (secured or unsecured, senior or junior); and a judge supervises a process of bargaining among class representatives to determine a plan of action and a division of value for the firm. During the process, incumbent management usually runs the firm. An important part of the procedure is that a plan can be implemented if it recelves approval by a suitable majority of each claimant class; unanimity is not required.

U.K. Administration was introduced in 1986 as "the British version of Chapter 11“. An important difference between U.K. Administration and Chapter 11 is that the U.K. administrator (who is an insolvency practitioner) runs the firm during bankruptcy. The bankruptcy law enacted in France in 1985 is also somewhat like Chapter 11. However, the court, through an administrator, has considerately more power than in the U.S. or U.K.: it can accept a reorganization plan without the approval of creditors (or workers), provided it best ensures the maintenance of employment and the repayment of creditors.

Chapter 11 has been criticized for being time-consuming, costly, too friendly to debtors and for not respecting absolute priority. The procedure could undoubtedly be modified to deal with some of these criticisms. However, there are two fundamental problems inherent in Chapter 11 and structured bargaining procedures like it. These problems arise be-

[5] But see Pulvino (1998).
[6] Countries in which a Chapter 11-type structured bargaining procedure has been introduced recently include Australia, Indonesia, Thailand and Argentina.

cause a structured bargaining procedure tries to make two decisions at once: what to do with the firm, and who should get what in the event of a restructuring of claims. Unfortunately, restructured firms do not have an objective value. Consequently, it is hard to know what fraction of the post-bankruptcy firm's securities each group of creditors is entitled to receive. This is true even if there is no dispute about the amount and seniority of each creditor's claim. As a result, there can be a great deal of haggling.

Perhaps even more serious, there is a danger that the wrong decision will be made concerning the firm's future. The voting mechanism is fixed in advance, which means that those people whose payoff ought not to be affected by the outcome (either because they are fully protected anyway, or because they are not entitled to anything) may end up controlling the pivotal votes.

As an example, consider a firm whose debts are approximately equal to its liquidation value. Creditors will push for a speedy liquidation (since they will be close to fully paid), while shareholders will hold out for a lengthy reorganization (since they enjoy the upside potential, but not the downside risk). Depending on the circumstances, a good firm may be terminated if creditors have the pivotal votes; or a bad firm may be kept going if shareholders have the pivotal votes.

In spite of these problems, Chapter 11 has its supporters. However, it is far from clear that a country embarking on bankruptcy reform should choose Chapter 11, rather than trying something new.

Bankruptcy reform

In this section I will describe a class of procedures that have some of the same features as structured bargaining, but are simpler. In particular, they allow the claimants the choice to restructure the firm; but they avoid haggling about the division of the proceeds. All of these procedures involve an automatic debt-equity swap. They may or may not also include an auction for the firm's assets or a formal vote on what should happen to the firm. The merit of these procedures is that they replace bargaining among claimants who have different objectives with a vote by a homogeneous group of shareholders.

Basic Procedure: When a firm goes bankrupt, its debts (most or all of them) are canceled. The former creditors become the (principal) new shareholders in the firm. A decision about the firm's future – whether it should survive as a going concern or be closed down – is made by the new shareholders. The firm then exits from bankruptcy.

There are two aspects to the procedure: the decision about whether to reorganize or liquidate the firm and the debt-equity swap. We discuss these in turn.

Decision about the firm's future

There are several ways of deciding the firm's future. We present three possibilities.

Version 1:[7] The firm is put up for auction (someone, e.g., a judge, supervises this). Cash or noncash bids are allowed. In a noncash bid, someone offers securities instead of cash. For example, incumbent management might offer the former creditors (the new shareholders) a combination of shares and debt in the post-bankruptcy firm. Thus, a noncash bid embraces the possibility of reorganization and/or recapitalization of the firm as a going concern. The new shareholders vote on which bid to select.[8]

Version 2:[9] The supervisor of the bankruptcy procedure, a trained bankruptcy practitioner (BP), say, takes over the running of the firm (she replaces the board of directors). The BP draws up a plan (or plans) for the future of the firm. The plan might be to reorganize the firm, to sell it as a going concern, or to close it down. (In fact, a plan is just like a cash or noncash bid.) The plan is implemented as long as it receives majority approval by the new shareholders. (The bankruptcy practitioner may choose to put more than one plan to shareholders and see which one receives greatest support.)

Version 3:[10] There is no formal auction or vote. Instead the choice of what to do with the firm is determined by the new shareholders via standard corporate governance procedures. In particular, soon after the debt-equity swap, an election is held for a new board of directors. (Any staggered board provisions are eliminated.) Takeover bids are also allowed through the elimination of all anti-takeover defenses (e.g., poison pills).

[7] This is based on Aghion et al. (1992).
[8] It may be efficient for incentive purposes that management retain an ownership stake in the post-bankruptcy firm. Such an ownership stake can be part of a noncash bid.
[9] This is based on Aghion et al. (1995).
[10] This is in the spirit of Bebchuk (1988).

The versions differ according to the level of involvement by outsiders, e.g., the courts, with Version 2 having the most outsider participation, and Version 3 the least. Less outsider participation comes at a cost: managers' jobs are most on the line in Version 2 and least on the line in Version 3. However, all the versions put management under some pressure, i.e., they go some way toward satisfying Goal 2.

The versions also meet Goal 1. The firm's future is decided by a homogeneous group – the new shareholders – who have a strong incentive to vote for an outcome that maximizes the firm's net present value.[11]

The Debt-Equity Swap

The other part of the scheme involves how debt is converted into equity. Again, there are several ways of doing this. If all debt has the same priority (e.g., it is unsecured), it is natural to allocate all the equity to the creditors on a pro-rata basis, possibly reserving a portion (10 percent? 20 percent?) for former shareholders.

Matters become more complicated if there is senior and junior debt. The reason is that it is not clear what fraction of the equity each group is entitled to. The leading example of senior debt in practice is secured debt. One possibility is to leave the secured debt in place, and just convert the unsecured debt into equity.[12] This turns the firm into a solvent one since the value of the firm is at least as great as the value of its physical assets (which are collateral for the secured debt).

Version A: Suppose there is a single class of unsecured creditors and some secured creditors. Then the secured debt is left in place, and the unsecured creditors become the new shareholders (with some of the shares possibly being reserved for the old shareholders).

Version A deals quite well with secured debt, but less well with other kinds of senior debt, e.g., preferred debt. Preferred debt refers to claims that society has decided should have priority over ordinary debt, e.g., unpaid wages of workers and taxes owed to the government. In practice, unpaid wages are not a great burden and the post-bankruptcy firm can pay them off by new borrowing. Taxes can be much more significant, but a simple solution here is to remove the government's priority and treat taxes owed to the government as unsecured debt.[13]

Another approach to dealing with debt of different securities, including secured debt, has been suggested by Bebchuk (1988). Bebchuk proposes eliminating all debt, and allocating shares to the senior creditors and options to buy shares to the junior creditors and shareholders. Specifically, junior creditors are allocated options to buy equity from senior creditors by paying what these senior creditors are owed. (In effect, they buy out their claim.) Similarly, shareholders are allocated options to buy back their equity by paying off all creditors. Note that this is a decentralized process: each option holder acts independently.

Version B: Suppose there are several classes of debt plus equity. Then the most senior class is allocated all the shares. A junior claimant (including a shareholder), owning X percent of her class's claims, is allocated the option to buy (up to) X percent of the equity from senior claimants by paying X percent of the total amount those senior to her are owed.

Bebchuk's scheme deals ingeniously with the general case of multiple debt classes. In effect no junior claimant (including shareholders) can complain that he is being underpaid since, if he thinks that those senior to him are getting more than they are owed, he can always buy them out at the face value of their debt. However, Bebchuk's scherne has the undesirable feature that junior claimants must put money in (i.e., exercise their options) to get money out (to be paid). This may be a problem if junior claimants are wealth-constrained. One possible solution is for the bankruptcy procedure supervisor (a judge or bankruptcy practitioner) to create a market for the firm's options and shares, so that junior claimants can sell their options. The sale of securities in this market can also be used to pay off some creditors. For a detailed proposal along these lines, see Hart et al. (1997).

To sum up, we have presented two ways of carrying out the debt-equity swap, both of which are in line with Goal 3. Combined with the three ways of deciding the firm's future, this means that we have six possible bankruptcy procedures. (Further variations on

[11] To the extent that the firm is worth more as a going concern than liquidated, putting the firm's future in the hands of shareholders should also lead to the preservation of workers' jobs.

[12] To be more precise, an appraisal would be made of the collateral underlying each secured claim. If the appraised value is more than the secured creditor's debt, the debt is left in place (it is fully secured). If the appraised value is less, then only the secured part is left in place; the residual is treated as unsecured debt and is converted into equity.

[13] An even more radical approach is to eliminate the priority of secured debt too, i.e., treat all debt as unsecured. For a discussion of this, see Bebchuk and Fried (1996).

these procedures are obvlously possible.) All of these procedures avoid the haggling problems that beset Chapter 11.[14]

Which procedure is best? The answer probably depends on the circumstances. For example, Version 2 of deciding the firm's future, combined with version A of the debt-equity swap, might work well in a country with trained bankruptcy specialists (e.g., the U.K.). On the other hand, Version 3, combined with Version A, might work well in a country where the judicial system is not very developed and/or the macroeconomic environment is such that there are too many bankruptcies for the courts to handle.[15]

In fact, because it is unclear which procedure is best, a country could select a (limited) menu of schemes and let firms pick from them in advance (e.g., as part of their corporate charter or debt contracts).

A final important point concerns whether the state bankruptcy procedure should be mandatory. There seems to be no compelling reason why it should be. lf a firm and its creditors wish to opt out of the state system and write their own bankruptcy procedure – tailored to their own situation – why not let them do so?[16]

Concluding remarks

In conclusion, it is worth briefly touching on an important "political economy" issue that arises in any country that is considering bankruptcy reform: the transition problem. Although we have argued that a debtor and creditors should jointly favor a more efficient bankruptcy procedure, this may not be the case in the short run given that firms will have debts in place negotiated under a previous regime.

For example, some countries currently have pro-debtor bankruptcy laws and are thinking of making them more pro-creditor. Debtors resist the changes because they are already paying the "cost" of pro-debtor procedures through high interest rates. One way to deal with this problem is to leave the current procedure in place and introduce the new bankruptcy procedure as an option, i.e., debtors can choose whether or not to switch to it (if they switch, they have to do so on all their debt contracts). In the short run debtors may choose not to switch. However, in the long run, as their old debts expire, they are likely to switch if the new procedure really is more efficient: they face a choice of paying high interest rates under the old procedure or low interest rates under the new procedure.

In fact, this example illustrates the desirable feature of a menu of procedures more generally. With a menu there is a "market" test. lf several procedures are available, then in the long run the efficient ones are likely to be chosen by debtors and creditors; the others will eventually be discarded.

[14] These procedures also avoid the need for special "debtor-in possession" financing. This is because both Versions A and B of the debt-equity swap turn the firm into a solvent one, which should be able to raise capital given a profitable investment opportunity.
[15] I am grateful to Joseph Stiglitz for this observation.
[16] An interesting example of parties writing their own procedure is Administrative Receivership in the U.K. Under Administrative Receivership, an important creditor – typically a bank – contracts with the debtor to be granted what is called a "floating charge." This glves this creditor the right to appoint a receiver when the firm defaults. The receiver takes charge of the firm and decides whether to sell the assets piecemeal or maintain the firm. As Franks and Sussman's interesting paper (1999) shows, Administrative Receivership is best seen as a privately negotiated contract between a debtor and its creditors. There seems no reason to interfere with such a contract.

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Insolvency Laws Around the World – A Statistical Analysis and Rules for Their Design

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The growing literature on law and finance suggests that the development of capital markets is promoted by greater investor protection, while more developed credit markets exist in countries with greater creditor protection.[1] An important component of a country's creditor rights is its insolvency framework, which together with a supporting judicial environment affects the degree to which commercial distress is resolved using formal bankruptcy proceedings. Strong bankruptcy regimes also play a role in determining higher liquidation values and improved chances of ex-post firm survival. A good insolvency regime is one with ex ante screening mechanisms that prevent managers and shareholders from taking imprudent loans and lenders from giving loans with a high probability of default. At the same time it should also deliver an ex-post efficient outcome, in that the highest total value is obtained for the distressed firm with the least direct costs and loss in going concern value. Recent financial crises in Argentina and Russia have highlighted the importance of well-functioning insolvency systems in preventing and resolving corporate sector financial distress.

Consequently, there is increased interest in the design of insolvency systems from the points of resource allocation, efficiency, and stability as well as equality and fairness. There are many aspects in which insolvency regimes differ across countries. Investigating the actual use of the bankruptcy regime in relation to countries' specific insolvency features can be a way to shed light on the importance of particular creditor rights.

Insolvency around the world

Insolvency regimes are complex in design as they try to balance several objectives, including protecting the rights of creditors – essential to the mobilization of capital for investment and working capital and other resources – and preventing the premature liquidation of viable firms. In addition to legal rights, there is a need for an efficient judicial system to enforce these rights, or at least to serve as a credible enforcement threat, and to speedily conduct the process of liquidation or restructuring when so desired. These different objectives and constraints have led to differences in insolvency and collateral regimes across countries, as well as considerable variation in the actual use of bankruptcy proceedings to resolve financial distress. The fact that the literature has found no strong relationships between (an index of) creditor rights, on the one hand, and various aspects of financial sector development and functioning, on the other, may relate to the difficulty of capturing the many features of insolvency regimes.

In a recent study, Claessens and Klapper (2005) document the actual usage of bankruptcy across countries and provide insight on how creditor rights features affect actual bankruptcy use. Previous research has been based on the use of an index of CREDITOR RIGHTS consisting of the summation of four dummy variables, with four the highest possible score (La Porta et al., 1998). The components are:

a) *Restrictive Reorganization*, equal to 1 if the timetable for rendering a judgment is less than 90 days;
b) *Mandatory Management Turnover*, equal to 1 if incumbent management does not stay during a restructuring or bankruptcy;
c) *No Automatic Stay*, equal to 1 if there is no automatic stay on assets;
d) *Secured Creditors Priority*, equal to 1 if secured creditors have the highest priority in payment.

This paper tests whether there are differences between the effects of each specific creditor rights on

* World Bank and CEPR.
** World Bank.

[1] See Levine (2004) for a review of the literature.

firm and creditor behavior. For instance, a stipulation in the insolvency law that provides creditors with the right of no automatic stay on assets also provides creditors with some bargaining power that may allow them to more easily negotiate debt restructuring out of court. At the same time, the absence of an automatic stay may lead to a creditor race to seize assets, thus possibly accelerating the possibility of financial distress and bankruptcy. However, previous guidelines for an effective insolvency and creditor right system suggests that there should preferably be an automatic stay on assets for at least some initial period (World Bank, 2001). This suggests that there are some differences of opinion on what constitute desirable creditor rights features, which in turn may relate to lack of understanding on how certain creditor rights features affect actual bankruptcy use.

The presence in the law of secured creditor priority and absolute priority of claims in bankruptcy or restructuring (i.e., senior creditors are paid first, then junior creditors, followed finally by shareholders if any residual remains) is another example. Such priority may deter ex-ante risky financial behavior and thus reduce the likelihood of financial distress. But such feature can also help overcome creditor coordination problems when a corporation is in restructuring. At the same time, if the law stipulates that shareholders receive nothing in bankruptcy, a firm may attempt to delay or avoid bankruptcy, including undertaking more high-risk projects when the corporation starts to run into financial distress. Alternatively, an insolvency law that stipulates that managers must automatically leave when a firm is in bankruptcy, might be associated with greater use of bankruptcy as creditors will stand to gain more from using this right in formal bankruptcy procedures. These discussions show that each of the specific creditor right features may influence firm and creditor behavior differently and what constitutes a desirable creditor right feature may depend on circumstances or objectives.

To examine these arguments, the authors analyze how actual bankruptcy filings relate to countries' individual creditor rights and overall judicial efficiency in order to identify which creditor rights are more important and how a strong judicial system affects their relative importance. The authors constructed a unique dataset on the number of commercial bankruptcy filings in 35 countries, which included all legal proceedings designed to either liquidate or rehabilitate insolvent firms. The average number of total commercial bankruptcy filings was collected from government and private sources for the period 1990 to 1999. The main insolvency measure was constructed by including firms that filed for liquidation or reorganization; thus the measure refers to the total use of the bankruptcy law and the associated judicial system to resolve corporate financial distress. A description of the macroeconomic and legal variables used for the 35 countries examined is given in Table 1.

Panel regressions (not shown) find, controlling for overall economic development and macroeconomic shocks, that bankruptcies are more frequent in countries with better functioning judicial systems. The efficiency of the legal system is significantly and positively related to filing for bankruptcy – the greater the likelihood a creditor can efficiently restructure and collect using the court, the more likely creditors are to use formal bankruptcy proceedings in the case of default. However, CREDITOR RIGHTS, a simple index for the presence of creditor rights alone, as used in past research, is not associated with a greater use of bankruptcy. The overall strength of creditor rights is negatively, but not significantly, related to the occurrence of bankruptcy across countries, although the coefficient for judicial efficiency remains statistically significant.

Of primary importance is the shift from aggregate creditor rights to its individual components. Regression results on that basis are summarized in Table 2. In Column 1, CREDITOR RIGHTS and each of the four subindices are included in separate regressions. Of the four subindices, one is significantly positive – RESTRICTIVE REORGANIZATION – and one is significant negative – NO AUTOMATIC STAY. The other two subindexes, SECURED CREDITORS PAID FIRST and MANDATORY MANAGEMENT TURNOVER, are not significant. These differences suggest that the deterrence and actual bankruptcy usage effects vary by individual creditor rights and that a simple aggregation of creditor right characteristics is problematic.

For example, restrictions on reorganization, such as creditors' consent, provides creditors with more legal tools and reduces the debtor's degrees of freedom, leading to greater use of bankruptcy, including reorganizations. In contrast, the ability of secured creditors to seize assets even when a firm has filed for bankruptcy seems to deter the filing for bank-

Table 1

Summary statistics, by country

Country	Available years	No. of bankruptcies	BNKRPT in %	Legal origin	Rule of law	Creditor rights
Argentina	92–99	2,144	0.12	French	5.35	1
Ausralia	90–99	5,505	2.10	English	10	1
Austria	90–99	2,065	1.33	German	10	3
Belgium	90–99	4,850	2.59	French	10	2
Canada	90–98	12,697	2.96	English	10	1
Chile	90–99	89	0.28	French	7.02	2
Colombia	96–99	226	0.16	French	2.08	0
Czech Republic	92–96	1,729	1.49	Transition	8.3	3
Denmark	90–99	2,376	1.53	Scandinavian	10	3
Finland	90–98	5,106	4.14	Scandinavian	10	1
France	90–99	51,672	2.62	French	8.98	0
Germany	92–98	21,153	1.03	German	9.23	3
Greece	90–94	857	0.29	French	6.18	1
Hong Kong	90–98	1,519	0.55	English	8.22	4
Hungary	92–96	8,425	1.99	Transition	8.7	3.75
Ireland	90–99	789	2.74	English	7.8	1
Italy	90–96	8,663	0.54	French	8.33	2
Japan	90–99	14,001	0.22	German	8.98	2
Netherlands	90–99	3,996	1.30	French	10	2
New Zealand	93–98	716	3.67	English	10	3
Norway	90–98	3,547	1.83	Scandinavian	10	2
Peru	93–99	145	0.05	French	2.5	0
Poland	90–96	3,320	0.23	Transition	8.7	2.25
Portugal	91–99	516	0.08	French	8.68	1
Russia	95–98	2,771	0.31	Transition	3.7	3
Singapore	90–99	228	3.06	English	8.57	4
South Africa	90–99	2,919	4.62	English	4.42	3
South Korea	90–98	163	0.17	German	5.35	3
Spain	90–99	519	0.02	French	7.8	2
Sweden	90–99	13,917	7.61	Scandinavian	10	2
Switzerland	90–98	9,213	3.33	German	10	1
Thailand	90–99	372	0.13	French	6.25	3
Turkey	98–99	1,496	0.86	French	5.18	2
U.K.	93–98	46,584	1.85	English	8.57	4
U.S.A.	90–99	55,753	3.65	English	10	1

Statistics are reported as the average over available years. Number of bankruptcies were collected from country sources. *BNKRPT* is the ratio of the number of bankruptcies to the number of firms.

ruptcy. This suggests that bankruptcy is a more efficient tool to use when there is an automatic stay on assets, as it helps avoid a creditor race. The no automatic stay provision may, however, still be useful in weak judicial environments as otherwise creditors may be too vulnerable to the discretion of the judicial system. The fact that creditor priority is not significant may indicate that the priority creditor rights feature deters risky behavior and thus reduces the probability of financial distress. It may also reflect that most laws permitting secured creditor rights allow a creditor to seize its secured assets out of court, i.e., without the creditor having to file for bankruptcy. The insignificant sign for the mandatory management turnover index may reflect two opposing effects. For some firms, the requirement to replace management when in bankruptcy is discouraging when incumbent management provides useful skills and know-how. For other firms, there may be value for creditors to be able to replace management immediately when using bankruptcy procedures; for example, when incumbent management may be delaying necessary, but painful restructurings. On balance, this may explain why an insignificant sign results.

Of further interest is the interaction between the effects of judicial efficiency and the individual and aggregate creditor rights. Column 2 shows, in addition to the CREDITOR RIGHTS (sub-) indices and the RULE OF LAW index, the interaction between the two indexes included in the regressions. These regression results generally confirm the earlier finding that efficient courts lead to greater usage of bankruptcy, as does the presence of creditor rights,

Table 2

Cross-country regressions with creditor rights and legal efficiency

		Creditor rights and legal efficiency	Creditor rights and legal efficiency: interaction effects
(1)	Rule of Law	0.258***	0.438***
		(2.81)	(5.77)
	Creditor Rights	–0.067	0.892**
		(–0.85)	(2.50)
	Rule of Law * Creditor Rights	–	–0.125***
			(–3.00)
	Adj. R–squared	0.17	0.20
(2)	Rule of Law	0.242***	0.383***
		(2.94)	(5.81)
	Restrictive Reorganization	0.563**	4.584***
		(2.30)	(3.76)
	Rule of Law * Restrictive Reorganization	–	–0.482***
			(–3.34)
	Adj. R–squared	0.19	0.24
(3)	Rule of Law	0.316***	0.299***
		(3.68)	(3.27)
	No Automatic Stay	–0.987***	–1.734***
		(–5.12)	(–2.76)
	Rule of Law * No Automatic Stay	–	0.090
			(1.23)
	Adj. R-squared	0.231	0.23
(4)	Rule of Law	0.251***	0.298***
		(2.77)	(3.90)
	Secured Creditor Paid First	0.120	0.726
		(0.48)	(0.86)
	Rule of Law * Creditor Rights	–	–0.085
			(–0.79)
	Adj. R-squared	0.169	0.17
(5)	Rule of Law	0.253***	0.422***
		(3.04)	(5.59)
	Mandatory Management Turnover	–0.014	3.492***
		(–0.05)	(3.24)
	Rule of Law * Mand. Management Turnover	–	–0.463***
			(–3.29)
	Adj. R-squared	0.169	0.21

The dependent variable is the ratio of the number of bankruptcies to the number of firms. Transition countries are excluded from all regressions because of the unavailability of disaggregated creditor rights. The regressions are estimated using ordinary least squares with robust standard errors. t-statistics are in parentheses, *, **, and *** indicate significance at the 10%, 5%, and 1% respectively. All regressions include lagged values of GDP per capita, annual GDP growth rates, a dummy indicating a financial crisis, interest rates and year fixed effects. All regressions include 273 observations.

except for the no automatic stay provision. The negative signs for many of the interaction terms suggest a substitution effect: in countries with high judicial efficiency, actions by the courts substitute to some extent for strong creditor rights and encourage more use of bankruptcy procedures. Well functioning courts may weigh, for example, the balance between the costs and benefits of having management stay or leave when filing for bankruptcy and provide a better judgment whether the debtor is cooperative or not in making restructuring proposals.

The lack of significance of the interaction term for NO AUTOMATIC STAY may imply that while an automatic stay on assets is triggered by a court, it is a simple court action that does not require much further action by the judiciary and as such is less affected by the efficiency of a country's court system. These substitution effects in turn suggest that in countries with weak judicial proceedings creditors will use bankruptcy – a costly resolution – only if they have very strong entitlements. For example, in order for creditors to implement their rights, a business environment that allows for easy and electronic registering of collateral may be more important than the availability of efficient courts, leading to the insignificant coefficients for creditor rights and the interaction term.

As robustness checks, additional regressions included the following control variables (results not shown):

a) Restrictiveness of Entry,
b) Regulation of Labor Markets,
c) the ratio of the Number of Total Patents to the Total Number of Manufacturing Firms,
d) the percentage of Employment attributed to Small-Medium-sized Enterprises (SMEs).

The main results are robust to the inclusion of these variables. Furthermore, countries in which it is more restrictive and difficult to open a new business are found to have lower bankruptcy rates. Restrictive employment laws are significantly negatively related to the use of bankruptcy. Bankruptcy is used relatively more often in countries that use more intangible assets in their economy (as proxied by the number of patents), possibly because bankruptcy and reorganization procedures allow better for the preservation of these assets. Finally, SMEs are less likely to use bankruptcy proceedings.

The World Bank's "Principles & Guidelines"

The results of Claessens and Klapper (2005) suggest that well designed bankruptcy laws may encourage a greater use of formal bankruptcy proceedings. In an ongoing dialogue since 2001, the World Bank (2005) has developed a catalogue of *Principles and Guidelines for Effective Insolvency and Creditor Rights Systems*. This manuscript presents 33 principles that countries should adopt to promote more efficient resolution of financial distress. These are separated into four broad focus areas as summarized in Table 3 and briefly described below.

The legal framework for creditor rights

The first group establishes principles for the creation of enforcement mechanisms to promote credit markets. These principles set a framework for the protection of credit providers in terms of the allowance of security interests in both immovable (i.e. mortgages, charges etc.) and movable property (whether tangible or intangible). They further point out the imperativeness in creating integrated and accessible registry systems providing accurate (and electronic) records of security interests. Finally, the principles highlight need for supportive commercial enforcement systems. These entail both judicial and non-judicial mechanisms and procedures that provide efficient, transparent and reliable enforcement of secured and unsecured debt.

The risk management and corporate workout

The second area of interest shifts from the legal framework to the corporate workout and puts forth five principles related to risk management. First, access to complete credit information of borrowers' borrowing and payment history (i.e. both positive and negative information) is stressed. This requires a supporting legal framework, mechanisms for data protection, policies prohibiting societal discrimination and protecting subjects' privacy, as well as continuous monitoring of the systems' operation. Second, the necessity for setting legal standards of director and officer accountability on behalf of distressed or insolvent enterprises is underlined. The third principle concerns the existence of an enabling legislative framework that ensures the possibility of restructuring and restoration of distressed but financially viable enterprises. The fourth prin-

Table 3

World Bank Principles for Effective Insolvency and Creditor Rights Systems

	Part A. Legal Framework for Creditor Rights
A1	Compatible Commercial Law Systems
A2	Security (Real Property)
A3	Security (Movable Property)
A4	Recording and Registration of Secured Rights
A5	Commercial Enforcement Systems
	Part B. Risk Management and Corporate Workout
B1	Credit Information Systems
B2	Director & Officer Accountability
B3	Enabling Legislative Framework
B4	Corporate Workout - Restructuring Procedures
B5	Regulation of Workout and Risk Management
	Part C. Legal Framework for Insolvency
C1	Key Objectives and Policies
C2	Due Process: Notification and Information
	Commencement
C3	Eligibility
C4	Applicability and Accessibility
C5	Provisional Measures and Effects of Commencement
	Governance
C6	Management
C7	Creditors and Creditors Committee
	Administration
C8	Collection, Preservation, Administration and Disposition of Assets
C9	Stabilizing and Sustaining Business operations
C10	Treatment of Contractual Obligations
C11	Avoidable Transactions
	Claims and Claims Resolution
C12	Treatment of Stakeholder Rights & Priorities
C13	Claims Filing and Resolution
	Reorganization Proceedings
C14	Plan Formulation and Consideration
	Voting and Approval of Plan
	Implementation and Amendment
	Discharge and Binding Effects
	Plan Revocation and Case Closure
C15	International Consideration
	Part D. Implementation: Institutional and Regulatory Frameworks
D1	Role of Courts
D2	Judicial Selection, Qualification, Training and Performance
D3	Court Organization
D4	Transparency and Accountability
D5	Judicial Decision making and Enforcement
D6	Integrity of the System (Courts and Participants)
D7	Role of Regulatory or Supervisory Bodies
D8	Competence and Integrity of Insolvency Administrators

ciple promotes the use of informal workout practices such as voluntary negotiation, mediation and informal dispute resolution as complements or useful precedents of formal proceedings. The last principle pertains to regulation and practice and endorses an environment where financial institutions and regulators support a consensual code of conduct.

The legal framework for insolvency

The third pillar of regulatory principles focuses on the insolvency framework. Of great importance is the timing and the proper use of the insolvency system, its balance with reorganization practices, the asset value maximization for creditor recovery protection, and the establishment of a cross-border insolvency framework. The protection of the rights of the related parties is examined, with a special focus on practices of notification and information. For instance, the right to be heard must be guaranteed to all parties involved and intermediation by impartial and independent experts and investigators must be offered for the resolution of a dispute.

The next three principles focus on the commencement of the insolvency processes. Both debtors and creditors should be entitled to apply for insolvency proceedings, and when creditors do, debtors must be given the opportunity to defend against the application in court before the commencement of the case. After insolvency proceedings commence, measures must be granted to protect the debtor's assets and the interest of stakeholders. This entails a stay of actions by secured creditors in reorganization proceedings, although the stay must always be of limited, specified duration, balancing between creditor protection and insolvency objectives.

The next two principles focus on governance while under insolvency proceedings. The guidelines recommend either

a) exclusive control is entrusted to an independent insolvency representative;
b) management remains in control; or
c) supervision of management is undertaken by the independent representative or supervisor.

In the latter two approaches, complete power should be shifted to the independent authority if management displays any form of misbehavior or incompetence.

The seventh guideline safeguards creditors' role and rights during proceedings. The preferred mechanism to ensure fairness and integrity is a creditors' committee, especially when the creditors are numerous. The functions of the committee should be chartered by the law and it should serve as a conduit for processing and distributing information to the creditors and facilitating their decision processes. Principles 8 – 11 refer to administration of debtor's assets, which should be protected during proceedings. For instance, ordinary operations should be permitted the business should have access to sound, monitored financing in order to meet ongoing needs.

The last four principles concern claim resolutions under insolvency. Priority is given to the collateral of secured creditors, followed by unsecured creditors. Consideration to employee rights should be given, while shareholders are entitled to compensation either when creditors have been fully repaid or under limited exceptions. The reorganization plan must be structured and approved by the majority of creditors and its implementation should be independently supervised and be open to amendment. Finally, international aspects of insolvency proceedings are examined, and rules for their facilitation are set.

The implementation strategy, in terms of the institutional and regulatory frameworks

The forth group of principles present eight guidelines concerning the implementation of the aforementioned principles. These consider the role of courts, the judicial selection, training and performance, and court organization. Of key importance is transparency, accountability and integrity of the system. The last two principles examine the role of regulatory or supervisory bodies appointing insolvency representatives. Criteria ensuring the integrity and competence of these representatives are established.

Conclusion

A better understanding of how the different features of creditor rights are individually related to bankruptcy rates use can be useful for policymakers. Claessens and Klapper (2005) show that while the overall index of creditor rights is not statistically significantly associated with more use of bankruptcy, there exist statistically significant effects for individual creditor rights, which also differ in direction. Specifically, the presence of a "no automatic stay" is associated with fewer bankruptcies and the presence in the law of a "restriction on reorganizations" with more bankruptcies. The use of bankruptcy also varies by the efficiency of the judicial system. Greater judicial efficiency is associated with more use of bankruptcy, but the combination of more creditor rights with greater judicial efficiency leads to less use, suggesting some substitution between creditor rights and judicial efficiency.

These findings suggest that insolvency systems with greater creditor rights and efficient judicial systems encourage less risky behavior and more out-of-court settlements. They also suggest that strong creditor rights are more necessary in countries with weak judicial systems to compensate for weaknesses in legal enforcement. The World Bank (2005) *Principles and Guidelines for Effective Insolvency and Creditor Rights Systems* proposes a framework for efficient bankruptcy proceedings and resolution of financial distress. Implementation of these design features may in turn affect the relative use and importance of bankruptcy across countries.

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EU Insolvency Regulation and its Impact on European Business

Bob Wessels *

"… After all our complaints of the frequency of bankruptcies, the unhappy men who fall into this misfortune make but a very small part of the whole number engaged in trade, and all other sorts of business; not much more perhaps than one in a thousand. Bankruptcy is perhaps the greatest and most humiliating calamity which can befall an innocent man. The greater part of men, therefore, are sufficiently careful to avoid it. Some, indeed, do not avoid it; as some do not avoid the gallows." These are the words of Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*.[1] In those days regulation of insolvency was rare too and sometimes contained criminal sanctions. Only a few bilateral treaties (within what now is the Netherlands and in Italy) existed. Nowadays however, the number of one in a thousand has become obsolete. In Europe in 2002, in the (then) fifteen member states, filings for insolvency amounted to a quarter of a million for individuals. In addition, around 150,000 businesses went into insolvency. The numbers have gone up dramatically as has the volume of legislation with regard to international or cross-border insolvency law.

In 2000 the EU Insolvency Regulation No. 1346/2000 was created, which entered into force on 31 May 2002. For several financial institutions, falling outside the scope of the Regulation, Directive 2001/17 and Directive 2001/24 were issued in 2001 on the reorganization and winding-up of insurance undertakings and of credit institutions. Where a Regulation is a European Community law measure binding fully the EU member states (except for Denmark, which opted out), both directives have to go through a legislative implementation process in each individual EEA (European Economic Area) member state. The implementation date for Directive 2001/24 is 20 April 2003 and for Directive 2001/24 it is 5 May 2004, and the drafting process in all countries is nearing its final phase.

For internationally active companies, insolvency is the doom of many: the Kirch Group, Swissair, Landis, Fairchild Dornier, Philipp Holzmann, Daisytek, Parmalat, MG Rover, Collins & Aikman, and a raft of other businesses have experienced it in recent years. Most of these companies have their headquarters in one of the EU member states and several subsidiaries in other member states.

This article describes the current European legal insolvency framework relating to legal persons. I will start by describing some of the major differences between domestic insolvency laws in countries in Europe, as these differences are often regarded as too numerous to be overcome and harmonized (part 1). On the European level the Insolvency Regulation was enacted in 2002 (part 2). Decisive for the international jurisdiction of a court is a debtor's centre of main interest (part 3). The Regulation should be seen in its procedural context, as it fills the gap which had been left open by the introduction of (what then was) the 1968 Brussels Convention, dealing with the international jurisdiction and recognition of judgments in civil and commercial matters. In the context of legal proceedings the latter (now known as the Brussels Regulation 2000) forms the general rule; the Regulation (for insolvency judgments) itself forms the special rule. As "financial institutions" are not covered by the EU Insolvency Regulation, the latter serves in turn as a general rule with regard to credit institutions and insurance undertakings, for which entities Directives 2001/17 and 2001/24 were issued. After demonstrating the model on which the Regulation is built (part 4), some communal tendencies will be highlighted (part 5).

Domestic differences

National insolvency law systems diverge as a result of differences in the structure of the market in a

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[1] 1779; part. II.3.29.

country's general legal system, in its order of private law and in its insolvency law itself. Insolvency focuses, as the word indicates, on a certain person (a debtor, being a natural person or a legal person) who is not paying his debts as they fall due. If a country's "insolvency test"[2] is met, this forms a ground for invoking certain formal insolvency proceedings. Where "insolvency" is related to the economic and financial structure of a market and given that the regulation of many markets still takes place within the confines of a national state, a government influences this structure, resulting, among other things, in countries with a market-led economy versus countries with a stringent social-economic policy.

The latter, for instance, include the former Eastern Bloc countries, with several economies in transition towards stringent social-economic policies. In addition, the tradition of the way businesses are financed will influence the robustness of rights of a creditor, for example, in some markets the financing of business through stock-listed shares or by bonds is well developed (capital markets), where in others the common method of finance is through (secured) credit either from a bank or from members of the family, with relatively strong (secured) positions for both of them. Certain social or economic policies in almost all countries lead to legal protection by way of preferences for certain creditors (employees, small business, the taxman). Secondly, as with other legal domains, the system of insolvency law is under the influence of the overall legal system of a country, such as a common law jurisdiction or a civil law jurisdiction. In the former, in general, the importance of case law, with an active role for a (sometimes specialized) court, is stressed in comparison with countries based on statute law (law in codes). Thirdly, in many countries the order of general civil law and commercial law is a matter of continuous discussion.

Some countries aim to insert both civil law and commercial law into one code (the Netherlands); others (Belgium, Germany, France) use different codes and some adjust the judicial framework accordingly. Finally, in relation to the existing market structure, the goals of insolvency proceedings may differ, e.g. plain liquidation of assets or in addition reorganization proceedings with the aim of rescuing the enterprise and/or preserving existing employment. Here a different view comes into play, as "insolvency" in its traditional concept deals with a debtor, with (or without any) assets, creditors, their claims, etc. Some systems of insolvency law do not provide for insolvency proceedings for certain types of debtors or have (only recently) introduced specific proceedings, e.g. debt discharge proceedings, for natural persons. All in all, national attitudes towards the phenomenon of insolvency are extremely variable, as are the social and legal consequences for the debtors concerned.

The EU Insolvency Regulation

On 31 May 2002 Regulation (EC) No. 1346/2000 of 29 May 2000 on insolvency proceedings entered into force. The Regulation applied entirely and directly to the ten member states that joined the EU as of 1 May 2004.[3] A Regulation is a European Community law measure which is binding and directly applicable in member states. The Regulation does not apply to Denmark, as it opted out in accordance with the Treaty of Amsterdam. The rationale for the Regulation is clear: "The activities of undertakings have more and more cross-border effects and are therefore increasingly being regulated by Community law. While the insolvency of such undertakings also affects the proper functioning of the internal market, there is a need for a Community act requiring coordination of the measures to be taken regarding an insolvent debtor's assets" (Recital 3 of the Insolvency Regulation). The Regulation acknowledges the fact that as a result of widely differing substantive laws "... it is not practical to introduce insolvency proceedings with universal scope in the entire Community" (Recital 11). The differences mainly lie in the widely differing laws on security interests to be found in the Community and the very different preferential rights enjoyed by some creditors in the insolvency proceedings.

The goals of the Regulation, with its 47 articles, are to enable cross-border insolvency proceedings to operate efficiently and effectively, to provide for co-ordination of the measures to be taken with regard to the debtor's assets and to avoid forum shopping. Forum shopping is the expression of a desire (of a creditor or a debtor) to look for the most favourable jurisdiction with regard to the protection of one's

[2] A "balance-sheet" test (assessing that the total of the debtor's outstanding liabilities exceeds the value of his assets) or a "cash-flow" test (the inability of a debtor to pay his debts as they fall due).

[3] Some smaller changes, based on Article 20 of the Act of Accession (O.J. L 236 of 23 September 2003), have led to a consolidated version of the Insolvency Regulation, see http://europa.eu.int/eur-lex/en/consleg/reg/en_register_1920.html. The Annexes have been amended by Council Regulation (EC) No. 603/2005, see O.J. L 100/1 of 20 April 2005.

own rights.[4] The Regulation, therefore, provides rules for the international jurisdiction of courts in a member state for the opening of insolvency proceedings, the (automatic) recognition of these proceedings in other member states and the powers of the "liquidator" in the other member states. The Regulation also deals with important choice of law (or: private international law) provisions. These contain special rules on applicable law in the case of particularly significant rights and legal relationships (e.g. rights in rem and contracts of employment). On the other hand, national proceedings covering only assets situated in the state of opening are allowed alongside main insolvency proceedings with universal scope. The following provides a brief overview of the contents of the Insolvency Regulation (InsReg).

The general provisions establish the area of application of the Regulation. It is confined to "proceedings which entail the partial or total divestment of a debtor and the appointment of a liquidator" (Article 1(1) InsReg). As far as the jurisdiction is concerned, the Regulation is based on the general principle that "… the courts of the member state within the territory of which the centre of the debtor's main interests is situated shall have jurisdiction to open insolvency proceedings" (Article 3(1)). For a company or legal person, the presumption is that the centre of the debtor's main interests is the place of its registered office, but this presumption may be rebutted (Art. 3(1) last line). The opened insolvency proceeding is called the main proceeding. Its most important consequence is that the law applicable to insolvency proceedings under the regulation is that "of the member state within the territory of which such proceedings are opened" (Article 4(1)), in legal jargon: lex concursus, and that this consequence shall be recognised automatically in all other member states (Article 16). In addition, the court of a member state other than the state opening main proceedings shall only have jurisdiction, if "... the debtor possesses an establishment within the territory of that other member state" (Art. 3(2)).[5] The effects of the latter proceedings – referred to as secondary proceedings – are, however, restricted to the assets of the debtor situated in the territory of the other member state (Art. 3(2) last line) and this proceeding may only be a winding-up proceeding.

[4] There is a difference between an article and a recital. The former is a binding legal text. The latter expresses an underlying rationale with a purely interpretative value.

[5] Article 2(h) provides that for the purposes of the EU Insolvency Regulation an "establishment" shall mean "... any place of operations where the debtor carries out a non-transitory economic activity with human means and goods".

Centre of main interests

The "centre of main interests" (in jargon: COMI) is in principle decisive for the ability of the court to deal with the proceedings and for the law which is applicable. COMI should correspond to the place where the debtor conducts the administration of his interests on a regular basis and is therefore ascertainable by third parties, as Recital 13 provides. In some 70 percent of all court cases from the mid-2002 until now, the determination of COMI is the principle point of legal conflict, with highly debated cases like Daisytek (involving sixteen subsidiaries in UK, Germany and France)[6] and Parmalat (involving Italy, Ireland, the Netherlands and Luxembourg). The outcome of the question "where is the centre of main interest?" in these decisions is based on many facts and circumstances, e.g.:

(i) The day to day administration is conducted in the forum state (the state the court of which opens the proceedings) (Ireland),[7]
(ii) The directors possessed the forum's nationality (Italy),[8]
(iii) The (Delaware incorporated) company had presented itself to its most substantial creditor as having its principle executive offices in the forum state (England),[9]
(iv) The debtor (natural person) has maintained, with regard to the substantial interests in a large number of companies established in the forum state, to administer these commercial interest in the forum state (the Netherlands),[10]
(v) The director (of an Irish incorporated company, being a wholly owned subsidiary of a UK company) was based in the UK and was solely responsible for the companies business,[11]
(vi) Some remaining contractual works (conducted by a company incorporated in Finland) were still in progress in the forum state (Sweden),[12]
(vii) The group's parent company (of an Austrian company with its seat in Innsbruck) is located in the forum state (Germany),[13]
(viii) The company (registered in the UK with a postal address in Spain) is a partner in a Swe-

[6] These European subsidiaries were left out of a filing of a Chapter 11 case in the US (Dallas, Texas) for the overall holding of Daisytek International, Inc.

[7] Court of Dublin 23 March 2004 in *Re Eurofood IFSC Limited* (Irish company, part of the Parmalat group).

[8] Court of Parma 19 February 2004 in *Re Eurofood IFSC Limited*.

[9] Court of Leeds (Ch. D) 20 May 2004 *Re Ci4net.com Inc and Re DBP Holdings Limited*.

[10] Netherlands Supreme Court 9 January 2004, JOR 2004/87, with my commentary.

[11] High Court London (Ch. D) 2 July 2004 in *Re Aim Underwriting Agencies (Ireland) Ltd*.

[12] Svea Court of Appeal 30 May 2003 (No. Ö 4105-03).

[13] Court of Munich 4 May 2004 in *Re Hettlage KgaA*.

dish limited partnership ("kommanditbolag") (Sweden),[14] and even

(ix) The codes to the computer programmes of the debtor company (registered in the UK, postal address in the UK, premises in Sweden) are stored in the forum state (Sweden).[15]

To determine the COMI of a debtor (e.g. a Dutch B.V., subsidiary of an Antilian Holding N.V.) it is not relevant where the COMI of the debtor's three subsidiaries (three German GmbHs) is situated. Decisive is the COMI of the debtor as a separate entity, irrespective of the fact that the debtor's interest is involved with the activities of the three subsidiaries.[16]

It may follow from the above that courts determine the COMI after the interpretation of a super abundance of facts. In general, I would submit that in these court cases one sees the confrontation of two concepts. The first one is a "contact with creditors" approach: through the eyes of creditors a debtor's COMI has to be determined. After all, Recital 13 provides that COMI should correspond to the place where the debtor conducts the administration of his interests on a regular basis "… and is therefore ascertainable by third parties" (my italics). The other view is the "mind of management" approach: the debtor's COMI must be situated where decisions are actually made, which often is within the jurisdiction where the parent company has its principle place for managing its (the group's, including the subsidiary's) operations.[17]

The insolvency experts are eagerly awaiting the European Court of Justice's decision with regard to one of the five questions referred to it by the Irish Supreme Court on 27 July 2004 (147/04). This question is worded as follows: "Where, (a) the registered offices of a parent company and its subsidiary are in two different member states, (b) the subsidiary conducts the administration of its interests on a regular basis in a manner ascertainable by third parties and in complete and regular respect for its own corporate identity in the member state where its registered office is situated and (c) the parent company is in a position, by virtue of its shareholding and power to appoint directors, to control and does in fact control the policy of the subsidiary, in determining the 'centre of main interests', are the governing factors those referred to at (b) above or on the other hand those referred to at (c) above?" The European Court's decision is to be expected early 2006.

The Regulation provides for several exceptions to the application of the "lex concursus" (Arts. 5–15 InsReg). These exceptions include third parties' rights in rem and reservation of title (Arts. 5 and 7) and set-off rights (Art. 6). These rights (under certain conditions) are not affected by the legal consequences (*lex concursus*) of the opening of main proceedings. In other instances an exception is created in that another choice of law (instead of the *lex concursus*) has been made. Important examples are contracts relating to immovable property (Art. 8: effects of insolvency proceedings shall be governed by the law of the member state within the territory of which the immovable property is situated) and contracts of employment (Art. 10: governed by the law of the member state applicable to the contract of employment). Insolvency proceedings opened in the opening state where the debtor has his COMI will be (automatically, Art. 16) recognized in all the other member states. Nevertheless, such recognition does not prohibit the opening of secondary proceedings in a state where the debtor owns an establishment (Article 16(2)).

Furthermore, the Regulation describes, amongst others, the powers of a liquidator, the publication of the opening judgement in another member state or in public registers. Any creditor has the right to lodge claims in writing if his residence is located in a member state other than the state of the opening of proceedings. This provision is meant also for the tax authorities and social security authorities (Art. 39). The Regulation further provides for a duty to inform known creditors in the other member state and the language to be used in the specific notice. Finally, in general, the EU Insolvency Regulation only applies to intra-Community relations; in cross-border insolvency cases relating to non-EU states the rules of general private international law or specific legislation of a country in this field apply.

The model

It seems quite evident that a secondary proceeding can only have a winding-up character (Art. 27). The model of main proceedings and concurring secondary proceedings, having this nature, has been criticized. It is submitted, however, that this limitation flows from the clear desire "... to achieve a system of international cooperation that is simple and easy to under-

[14] Court of Appeal Skåne and Blekinge 3 February 2005 (Ö 21-05).
[15] Court of Stockholm 21 January 2005 (K 17664-04).
[16] Court of Appeal The Hague 3 November 2005 (Nr. R05/1224) in *Re Q1Deutschland GmbH*.
[17] See my article "International Jurisdiction to Open Insolvency Proceedings in Europe, in Particular against (Groups of) Companies", in Wessels (2004), 155.

stand".[18] At the same time, during the preparation of (what now is) the Regulation the predominating thought was that "… the rules of mandatory coordination and the influence rights given to the main trustee would provide enough means to protect the rescue efforts in the main forum. This line of reasoning explains the rule adopted: secondary proceedings are possible, provided they are of the winding-up type, but they are subject to the … main-secondary scheme of coordination".[19] It is mainly in the power of the liquidator in the main insolvency proceedings to exercise measures for coordination, e.g. he may request the opening of secondary proceedings in other member states (Art. 29), participate in secondary proceedings (Art. 32(3)), request a stay of the process of liquidation of secondary proceedings (Art. 33(1)), request termination of this stay (Art. 33(2)), propose a rescue plan in the context of these secondary proceedings or he may disagree with finalizing liquidation in secondary proceedings (Art. 34(2)). He shall furthermore lodge all claims in the secondary proceedings which have been lodged in the main proceedings (Art. 32(2)), he is duty bound to communicate information (Art. 31(1)) and to cooperate (Art. 31(2)). Both latter obligations are duties for liquidators in secondary proceedings too.

The mutual duty between liquidators to communicate and to cooperate symbolizes that liquidators have to bridge the still existing deficit of uniform law. The performance of the duties to communicate and to cooperate is necessary in order to voice, with regard to all claims, the principle of equal treatment of pari passu ranked creditors. In a dozen or so separate provisions, the Insolvency Regulation gives shape to the idea of "unity of estate" (there is after all one debtor), with regard to which he who has the most dominant role (the main liquidator) in principle directs the completion of the insolvency process, under the supervision of a national court. In this process the main liquidator has, with regard to the secondary proceedings, a set of controlling or coordinating (procedural and substantive) powers that he can exert. It is for this reason that for the model of international insolvency law in the system of the EU, I use the description of "coordinated universalism".

European insolvency practitioners are presently discussing the creation of a set of best practices to serve as a guide for their cross-border work.[20]

[18] See Virgós (1998), 11.
[19] See Virgós, o.c., 11.
[20] See my editorial (2005) "It's Time to Cooperate", *International Corporate Rescue* 2 (6), 291.

Converging tendencies

The model of the Insolvency Regulation consists of four building blocks:

(i) main proceedings, the law of which (*lex concursus*) has universal (within the EU) effect,
(ii) special rules on applicable law (in contrast of a choice of *law for lex concursus*) in the case of particularly significant rights and legal relationships (e.g. rights in rem and contracts of employment),
(iii) special "territorial" proceedings (covering only assets situated in the state of opening) to run alongside main insolvency proceedings with universal scope, and
(iv) coordination between these proceedings.

The model, as indicated and expressed in Recital 12, acknowledges the existence of widely differing substantive laws, mainly (but not exclusively) the widely differing laws on security interests and the preferential rights enjoyed by some creditors in the insolvency proceedings to be found in the Community. Is there no alignment between elements of national insolvency law systems whatsoever?

One may detect a number of general tendencies, which in my opinion reflect that those who are involved in insolvency law (states, insolvency practitioners, courts, academics) are not thrown back fully on their own national sets of legislation and rules. Some main stream of alignment or even containing elements of harmonizing can be seen in certain features or topics of (international) insolvency law. Let me just name a few of these. In Europe many countries have revised and amended their legislation on insolvency law in the last two decades. Here one may observe two tendencies. Since the 1980s in over ten EU countries specific legislation has been introduced to deal with consumer debt. The Netherlands, Belgium and Germany followed in the late 1990s.[21] Another main stream in the domestic legislative domain is the inclusion of corporate rescue type of proceedings. Since the 1980s substantial revision has taken place in countries like England and Scotland, France and Belgium and in 1999 Germany and Italy. Poland and Romania followed in 2003, Spain in 2004 and France (again) in 2006, whilst in the Netherlands a substantial revision is underway. In many of these countries the US Chapter 11 procedure has served as a model for legislators.[22] A more recent observation

[21] Insolvency regulation for natural persons is (still) rare in Central and Eastern Europe, see Balcerowitcz et al. (2004).
[22] Gromek Broc and Parry, eds., (2004).

is the enactment or renewal of rules dealing with cross-border insolvency cases in relation to non-EU countries (Germany 2003; Poland, Spain and Belgium in 2004, the UK in April 2006), although remarkably the initiatives seem to progress in an uncoordinated manner.

Soft law is another tendency. Some ten years ago the Cross-Border Insolvency Concordat was adopted, which was drafted by the International Bar Association's Committee on Insolvency, Restructuring and Creditors' Rights. The concordat contains a design for the approach and harmonization of cross-border insolvency proceedings, aimed at a better collaboration and "equity". The idea of a cross-border concordat (or: protocol) was realized in practice, during ongoing international insolvency cases, such as *Re Maxwell Communication Corporation plc*[23] *and Re Olympia & York Developments Ltd. v. Royal Trust Co.*[24] The experience gained during these cases was shared with others, discussed and finally described in the concordat. A "protocol" has since been used in over twenty large cases, some of them also involving European insolvency proceedings.

Under the auspices of Insol International, the worldwide federation of national organizations of accountants and lawyers, specializing in the broad field of insolvency (law), issued the *Principles for a Global Approach to Multi-Creditor Workouts* in 2000. These are eight principles indicating "best practice" on how to act when a company, with a larger number of (foreign) creditors, is in financial trouble. The Principles are jurisdiction-neutral and therefore can be made in principle applicable, indifferent of the legal system in that specific country. The publication demonstrates that the principles are being endorsed by the World Bank, the Bank of England and the British Bankers Association and in several jurisdictions (e.g. Korea, Indonesia, Turkey) this approach is followed[25] or suggested.[26]

The EU Insolvency Regulation may be seen as a major step in improving the lacuna of cross-border insolvency within the major part of Europe. For others, though, it symbolizes especially the great diversity of national insolvency laws, where it aims to coordinate over 80 types of insolvency proceedings in 24 countries. A group, designating itself as the "International Working Group on European Insolvency Law" (founded in 1999, representing ten member states) has studied the question of how these differences can be reconciled with the ongoing economic integration of Europe and has done research into common characteristics in national insolvency law systems. These common elements were captured in the Principles of European Insolvency Law, fourteen in number, being presented in 2003 as reflecting "… the essence of insolvency proceedings in Europe as they reflect, on a more abstract level, the common characteristics of the insolvency laws of the European member states."[27] The principles do not deal with subjects like corporate groupings as an insolvent debtor or liability of directors or shareholders. Institutions like the United Nations Committee on International Trade Law (UNCITRAL), the World Bank and the European Bank for Reconstruction and Development (EBRD) promote the adoption of international standards and principles.

Thus we see the first steps are being made in a general alignment of legal systems, the application of (contracted) approaches, some first signs of willingness to look for communalities instead of stressing the differences and the availability of recommendations from several larger institutions. These may demonstrate, in the longer run, a development towards tuning and harmony. Within the EU, with ideas to support fresh start mechanisms, one may even recognize signs of a desire to establish and implement consistent policy.

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[23] [1992] B.C.L.C. 465.
[24] (1993), 20 C.B.R. (3d) 165.
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[26] Adriaanse (2005).

[27] See McBryde (2003). For a short review: Wessels (2003), *American Bankruptcy Institute Journal,* September, 28ff.

Bankruptcy and Small Business – Lessons from the U.S. and Recent Reforms

Michelle J. White*

Small business is an important part of the U.S. economy – about 11% of U.S. households include one or more self-employed workers.[1] Among the government policies that encourage small business and self-employment is bankruptcy law. U.S. bankruptcy law makes it more attractive for individuals to start and own small businesses by providing a soft landing if businesses fail: business owners can file for personal bankruptcy, their business and personal debts will be discharged, their future earnings will be exempt from the obligation to repay, and they may be able to keep their homes and other assets. The fact that about 17 percent of all personal bankruptcy filings in the U.S. include some business debt suggests the importance of bankruptcy policy for small business.[2]

In this article, I first describe small business bankruptcy law in the U.S. Then I discuss research on the effect of bankruptcy law on individuals' decisions to become self-employed and on business credit markets. Finally I discuss the effects of the bankruptcy reform legislation that went into effect in the U.S. at the end of 2005. The reform changed the treatment of small business owners in bankruptcy and may discourage self-employment.

U.S. bankruptcy law and small business

Because many small businesses are unincorporated, the business and its owner are legally the same. This means that debts of the business are personal liabilities of the business owner. Therefore when an unincorporated business fails, its owner is liable for a mixture of business and personal debts and the relevant bankruptcy law is personal bankruptcy law. Personal bankruptcy law is also important for many small corporations that fail. This is because lenders that make loans to small corporations often require the owner to personally guarantee the debt and/or allow the lender to take a lien on the owner's house. These guarantees and liens abolish the legal distinction between the corporation and its owner for purposes of the particular loan.

Chapter 7 of the U.S. Bankruptcy Code provides several important protections for small business owners. First, owners of failed businesses are allowed to file for personal bankruptcy under Chapter 7, where both their unsecured personal and business debts are discharged. Second, debtors' future earnings are completely exempt from the obligation to repay pre-bankruptcy debt, so that they can start new businesses or take jobs working for others without having their future earnings taxed to repay their old debts. The 100 percent exemption for future earnings applies all over the U.S. and is referred to as the "fresh start." Third, business owners (like other debtors in bankruptcy) must use all their wealth above an exemption level to repay pre-bankruptcy debt. Exemption levels are set by the 50 U.S. states and they vary widely. Higher exemptions encourage individuals – particularly those that are risk-averse – to become self-employed, since they will be allowed to keep more of their assets if the business fails. In high exemption states, owners of failed businesses may be able to keep their homes and other assets, while in low exemption states they keep little more than their clothes, furniture and cooking utensils.

Most states have several bankruptcy exemptions for different types of assets, but the most important is the exemption for equity in an owner-occupied home – the "homestead" exemption (see Table). As of 2006, six U.S. states – including Florida and Texas – have unlimited homestead exemptions. Unlimited exemptions allow individuals or couples who file for bankruptcy to shelter millions of dollars of assets from creditors, as long as the assets are converted in-

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[1] See Fan and White (2003).
[2] See Lawless and Warren (2005).

Chapter 7 U.S. Bankruptcy Code:
Protection for failed small business owners

Exemptions from creditor's access to the debtor's		
Future earnings	Wealth	
	Owner occupied housing (“Homestead exemption“)	Other
100% exemption in all U.S. states (allowing a “fresh start“) Note: This provision was changed in the 2005 reform. See text.	• Exemption unlimited in 6 U.S. states (e.g. Florida, Texas) • Exemption up to $500,000 e.g. in Massachusetts and Minnesota • Exemptions up to $10,000 in 13 U.S. states • No exemption in two U.S. states	Most U.S. states exempt goods of daily necessity and some types of insurance and retirement accounts.

Source: Author.

to equity in an owner-occupied home before the bankruptcy filing occurs. Other states have exemptions that are high but not unlimited – for example, Massachusetts and Minnesota have homestead exemptions of $500,000. At the other end of the spectrum, four states have no homestead exemption at all and 13 other states have homestead exemptions of $10,000 or less. Besides the homestead exemption, most states exempt clothing, furniture, and cooking utensils, and some have small exemptions for equity in a motor vehicle, other types of personal property, and some types of insurance and retirement accounts.[3]

The effect of bankruptcy exemptions on small business

How does variation in bankruptcy exemption levels across U.S. states affect small business and entrepreneurial behavior? One hypothesis is that, in states with higher exemption levels, individuals are more likely to own businesses because generous exemptions cushion them against the consequences of business failure. Another hypothesis is that small business lenders are more likely to deny applications for credit from small businesses that are located in high exemption states, because entrepreneurs in those states are more likely to file for bankruptcy and less likely to repay.

To test these hypotheses, I and two co-authors examined entrepreneurship patterns and markets for business credit across states with different exemption levels. We used the homestead exemption as the basis for comparison, because it is both the largest exemption in nearly all U.S. states and the most variable. We took account of the fact that renters cannot make use of homestead exemptions and, therefore, they cannot shelter as many assets when they file for bankruptcy. Bankruptcy thus provides a much more generous “insurance policy” for homeowners who go into business than for renters.

Effects on entrepreneurship

Wei Fan and I used the *Survey of Income and Program Participation*, a large panel dataset of U.S. households, to examine how variations in bankruptcy exemptions across states affect individuals' decisions to choose self-employment versus working as an employee. Our data cover the years 1993-98. We estimated a model explaining whether households contain one or more workers who are self-employed as a function of the bankruptcy exemption level in the household's state of residence plus control variables. The homestead exemption was represented as a series of dummy variables representing quartiles of the exemption distribution, plus an additional dummy variable for unlimited homestead exemptions. To allow the effect of higher exemption levels to differ for homeowners versus renters, we interacted all the homestead exemption variables with a dummy for owners versus renters.

For households that are homeowners, we found that the probability of owning a business increased from 0.101 in the lowest quartile of the exemption distribution to 0.135 in unlimited exemption states – or an increase of 35 percent over the entire range. For renters, the increase over the same range was from 0.083 to 0.107 – or 29 percent. Both increases are statistically significant. These results imply that both homeowners and renters respond strongly to increases in the homestead exemption in making their decisions to be self-employed. For renters, the strong response probably reflects the fact that most renters expect to become homeowners in the future.

The average business owned by a self-employed person is small. We therefore re-estimated the model for large businesses, defined as having net business in-

[3] Other features of U.S. bankruptcy law are uniform all over the U.S. For a more detailed discussion of bankruptcy law and economics and additional references, see White (2005).

come greater than $2,000 per month. We found that the probability of homeowners owning big businesses was 28 percent higher in states with unlimited homestead exemptions as compared to states with exemptions in the lowest quartile. This increase was statistically significant. For renters, the relationship was also positive, but it was not statistically significant.

We also examined whether entrepreneurs behave differently depending on whether their businesses are incorporated or not. We predicted that owners of non-corporate businesses would respond more strongly to changes in homestead exemption levels than owners of corporate businesses, because owners of corporate businesses are less likely to be personally responsible for their businesses' debts. They therefore are less likely to be affected by whether the exemption levels in their states are high or low.

For homeowners, we found that the probability of owning a non-corporate business was 37 percent higher in states with unlimited exemptions than in states with exemptions in the lowest quartile, while homeowners' probability of owning a corporate business was 14 percent higher. Both increases were statistically significant. Finally, we examined whether homeowners are more likely to start (as opposed to own) businesses if they live in states with high homestead exemptions. We found that their probability of starting a business was 23 percent higher in states with unlimited exemptions than in states with low exemptions.

These figures, taken together, indicate that bankruptcy law has a strong effect on whether workers choose self-employment.

Effects on small business credit

In the second study, Jeremy Berkowitz and I examined how bankruptcy exemptions affect small business credit markets. We used data from the 1993 National Survey of Small Business Finance, which is produced by the Federal Reserve Board of Governors and the U.S. Small Business Administration. The survey covers businesses with up to 500 employees. It asks managers whether they applied for credit during the previous three years and, if so, whether they were turned down. It also asks managers whether they were discouraged from applying for loans during the previous three years because they anticipated being turned down. We defined small businesses as credit rationed if they were either turned down for credit or discouraged from applying. We ran a regression model that explains whether small businesses are credit rationed as a function of the homestead exemption level in the firm's state and control variables. We also included measures of whether the firm or its owner previously experienced financial distress or filed for bankruptcy. We ran separate regressions for non-corporate versus corporate firms.

One problem with these regressions is that higher exemptions affect both supply of and demand for business credit. Demand for business loans rises in high-exemption states because entrepreneurs are more willing to borrow and invest when they have additional wealth insurance. However the supply of business loans falls in these states, because entrepreneurs are more likely to default and file for bankruptcy and this makes lending less profitable. The overall effect of higher exemptions on the extent of credit rationing depends on whether lenders reduce the supply of credit by more or less than entrepreneurs increase demand.

Holding other factors constant, our results show that the probability of a non-corporate firm being turned down for credit rises from 0.122 at the 25th percentile of the exemption distribution to 0.196 at the 75th percentile – an increase of 32 percent. We also find that the probability of a corporate firm being turned down for credit rises from 0.196 at the 25th percentile to 0.255 in unlimited exemption states – an increase of 30 percent. Both increases are statistically significant.

These results imply that both types of firms are more likely to be credit-rationed if they are located in states with high rather than low exemptions. The results also imply that, holding other factors constant, corporate firms are more likely to be credit-rationed than non-corporate firms at all exemption levels. This makes sense because non-corporate firms have both the firm's and the owner's assets to back up their loans, while corporate firms have only the firm's assets. Finally we found that small businesses are three times as likely to be credit rationed if they or their owners have previously filed for bankruptcy and twice as likely to be credit rationed if they or their owners have previously experienced financial distress. Thus past financial difficulties are a heavy burden when small businesses attempt to obtain credit. The effect is similar for corporate versus non-corporate firms.

We also examined how high exemption levels affect the interest rates that firms paid on their most recent loan. Here higher exemption levels are unambiguously predicted to cause interest rates to rise, since both the demand increase and the supply decrease point in the same direction. For non-corporate firms, we found that interest rates rise by more than 2 percentage points when firms are located in states with unlimited homestead exemptions rather than in states with exemptions at the 25th percentile of the distribution. For corporate firms, interest rates rise by 0.83 percentage points when firms are located in states with exemptions at the 75th percentile versus the 25th percentile. Since some corporations are credit-worthy enough to be able to borrow on their own, it is not surprising that interest rates paid by non-corporate firms are more sensitive to changes in exemption levels than interest rates paid by corporate firms. We also found that a past bankruptcy filing is associated with interest rates that are 5.4 percentage points higher for non-corporate firms and 2.1 percentage points higher for corporate firms.

A final result is that both corporate and non-corporate firms receive smaller loans if they are located in states with higher homestead exemptions. For both types of firms, loan size is $70,000 to $80,000 smaller if firms are located in states with homestead exemptions at the 75th percentile rather than the 25th percentile.

Overall, these results suggest that small businesses face more difficulty in raising capital if they are located in states with high exemption levels, but – despite this barrier – more individuals in these states choose to be self-employed.

Small business under the 2005 U.S. bankruptcy reform

The most significant change made to U.S. personal bankruptcy procedures under the 2005 reform is that debtors no longer have an automatic right to file for bankruptcy under Chapter 7. Instead they must undergo a new "means test," which compares their income to the median income level in their states. If debtors' income per month is more than $100 above the monthly median income in their states, then they may be forced to file under another personal bankruptcy procedure, Chapter 13, which has no "fresh start." Debtors in Chapter 13 must use part of their post-bankruptcy earnings for five years to repay their debt. The repayment requirement is based on a formula developed by the Internal Revenue Service for delinquent taxpayers. It sets a fixed dollar repayment requirement per month that in some cases could be more than the debtor actually earns.[4] However the new means test applies only to debtors who have "primarily consumer debts", so that small business owners are allowed to bypass it and file under Chapter 7 as long as most of their debt is business debt. For owners of failed businesses who file under Chapter 7, the bankruptcy reform also makes it more difficult to shelter financial assets using states' homestead exemptions, since it includes new restrictions on converting non-exempt assets into exempt home equity and on moving to Texas or Florida to take advantage of their unlimited homestead exemptions before filing. Finally the new law substantially increases the costs of filing for bankruptcy and imposes new paperwork and nuisance requirements.[5]

The research discussed here suggests that potential entrepreneurs are very responsive to the terms of the "bankruptcy insurance" policy. The new law reduces the amount of insurance that bankruptcy provides by requiring entrepreneurs to repay more from wealth or future earnings when their businesses fail. It therefore forces entrepreneurs to bear greater risk and provides a much harder landing for those whose businesses fail. As a result, many potential entrepreneurs will find it less appealing to go into business and fewer new firms are likely to be started each year in this U.S. This change will have both positive and negative effects. On the positive side, some entrepreneurial activity in the United States is essentially disguised unemployment and wiping it out will have little adverse effect. Also, business owners are likely to find it easier to obtain credit, because lenders will be more willing to extend business loans. But on the negative side, some of the businesses that never get started will inevitably involve innovative new ideas that would have generated jobs and economic growth. The result may be higher unemployment and lower economic growth in the U.S.

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[4] This differs from the pre-reform Chapter 13 bankruptcy procedure, which was voluntary rather than mandatory and allowed debtors to propose how much they would repay. These plans often involved only token repayment amounts.
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Insolvency in Selected OECD Countries: Outcomes and Regulations

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This article describes levels and long-term trends of business and individual insolvency in a country-comparative perspective. The developments are interpreted with respect to the characteristics (and the existence) of statutory insolvency rules.

Long-term developments of insolvencies

Figure 1 depicts the long-term development of all insolvencies, business and personal. The countries selected are those for which longer-term data exist *and* where the reported data differentiate between cases of business and personal insolvency. In order to make meaningful comparisons, the raw data on insolvencies must be normalised. Such a normalisation may take into account different country specificities, like population, number of businesses or average business size in terms of employees. Throughout the article the number of insolvencies is related to one million inhabitants.

All countries show fluctuations and a more or less pronounced upward trend. The exception is Sweden where only a (strong) fluctuation but not an upward trend is visible. The insolvency figures for the US and Canada are not only much higher than they are for the other countries, but they also seem to exhibit a higher growth dynamic. The latter is not the case, however, as the compound annual growth rates are highest by far for Germany (9.6 percent), while the other countries rank between 4.3 percent (Canada, with the lowest) and 6.4 percent (Australia).

Business insolvencies

Figure 1 comprises two quite different cases of insolvency, those of businesses and of individuals, and, thus, may not be too meaningful. Figure 2 is only about business insolvency. Sweden is a remarkable case, exhibiting a virtual eruption and later a strong decrease in business insolvencies between 1988 and 1998. Next to Sweden is France, with a long-term upward trend of business insolvencies and an amplitude – the latter occurring approximately in the same period as in Sweden.

The developments in the remaining countries can be seen more easily when Sweden and France are excluded from the picture (Figure 3). The most striking feature is the high degree of fluctuation in all countries – plausibly related to the country-specific business cycle. Obvious trends exist for Germany, Canada and the US. Business insolvencies in Germany have been on a nearly continuous and strong rise since the beginning of the 1990s (reunification with East Germany). By contrast, a downward trend is

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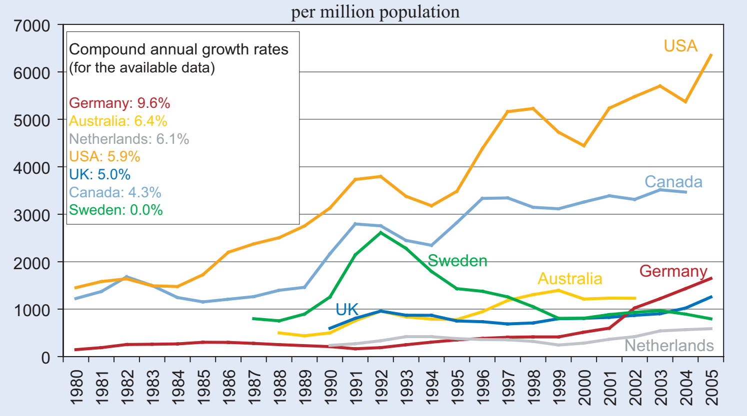
Figure 1

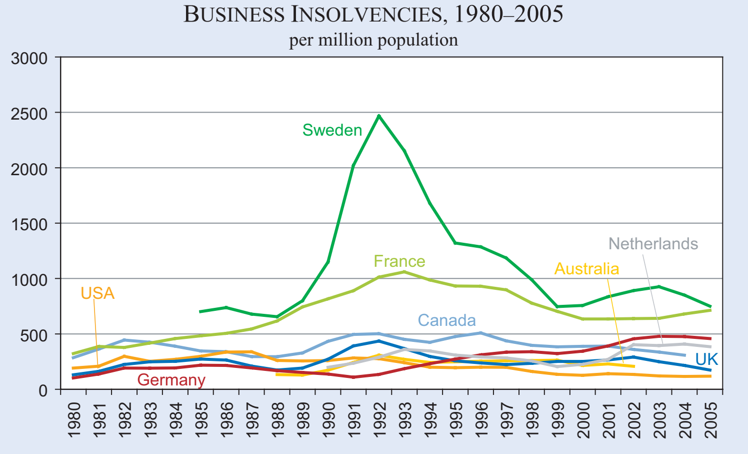
Total Insolvencies (Business and Individual), 1980–2005

per million population



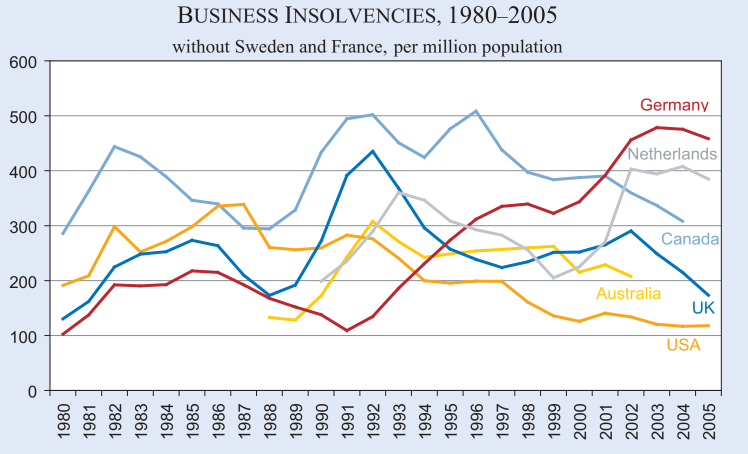
Source: American Bankruptcy Institute (2005) and national statistical sources.

Figure 2



Source: see Table 1.

Figure 3



Source: see Table1.

iour of firms is affected by the law in a multitude of ways. Moreover, not only the number of insolvency cases but also the quality of the outcome – from a debtor, a creditor and a social point of view – is affected. Box 1 lists some of the areas influenced by the law.

It should be noted that even the official statistical recording of cases as "insolvency" (or "bankruptcy", for that matter) is affected (item 3 in Box 1).

Not only is business behaviour influenced by the insolvency law in many ways, the law itself is multidimensional. In order to characterise insolvency laws and to compare them across countries, Wood (1995) has identified 7 main and a total of 11 fields of properties of such laws. In a more recent attempt, David Smith and Strömberg (2005) have developed a taxonomy which entails 8 main and a total of 25 fields of properties of insolvency laws (see Box 2).

visible in the case of Canada, at least from the 1990s onwards. A clear and nearly continuous downward trend, however, has occurred in the US since the late 1980s. In 2005, the US figure for business insolvencies per million inhabitants is the lowest of the countries considered here.

The *fluctuations* of business insolvencies, as depicted in Figures 2 and 3, can largely be interpreted in terms of the business cycle. The very strong amplitude of Swedish business insolvencies, e.g., also roughly coincides with the drastic measures of fiscal reforms and restructuring of the Swedish economy. Explaining the different *levels* across countries, however, is more difficult. A plausible approach is to relate business insolvencies to the respective national insolvency laws.

One should be aware that the legal provisions for cases of business insolvency affect much more than only the number of insolvencies treated according to the officially prescribed legal rules. Instead, the behav-

Box 1

The impact of insolvency laws on business behaviour and outcome

The design (even the existence) of an insolvency law influences …

1. Business behaviour

- which legal form is chosen for the enterprise
- how a project is financed (equity or debt)
- the availability of credit and the interest rate level
- how risky the chosen projects are
- how much effort the management exerts to avoid insolvency – or whether bankruptcy is even regarded and used as a management strategy (opportunistic behaviour)
- thus, how often insolvencies occur
- how cases of insolvency are resolved
  - guided by the rules of the bankruptcy law
  - or settled by bargaining (using self-created rules)

2. Quality of the outcome

- what the quality of the procedure is, in terms of:
  - extent of premature (not necessary) liquidations (instead of restructuring and/or provision of fresh money)
  - extent of retarded (but truly necessary) liquidations
  - recovery rate for the creditors
  - potential for a fresh start of the failed enterprise

3. Registering and classification of cases of insolvency

Source: author

Box 2

Taxonomy of corporate bankruptcy codes

Basic characteristics of the laws
- National denomination of "liquidation" code
- National denomination of "reorganisation" code
- Year of last change

Verification mechanisms

Coordination mechanisms
- Automatic stay of assets in reorganisation?
- Automatic stay of assets in liquidation?
- Voting rules for approval of reorganisation plan
- Flexibility in defining voting classes in reorganisation
- Limits on debt write-downs in reorganisation
- Cram-down in reorganisations
- Creditor committees

Protection of third party claimants
- Wage guarantee?
- Procedure should aim towards preserving employment?
- Priority of wages?

Maintaining asset value
- Possession of assets in liquidation
- Possession of assets in reorganisation
- Seniority of new financing in reorganisation?
- Time limits to reorganisation?
- Time limits to liquidation?

Liquidity and disposal of assets
- Exchange of debt for other securities possible in reorganisation?
- Sales mechanism in liquidation?
- Auctioneer/trustee incentive compatible?
- Limits on whom assets can be sold/transferred to?

First-mover advantages
- Debtor has advantage in filing?
- Who submits reorganisation plan?

Source: David Smith and Strömberg (2005) .

This impressive list may even be extended, for instance by the costs of the procedure and whether the court *has* to open a procedure or can decide *not* to do so. In Germany, for example, the costs of an insolvency procedure are considered as relatively high *and* the courts may not take up the case when the remaining assets do not cover the costs of the procedure.

With the help of their taxonomy, David Smith and Strömberg (2005) provide systematically structured and detailed information about the business insolvency regulations in six countries. A similar recent attempt has been undertaken by Davydenko and Franks (2005) for four countries. Their taxonomy, however, is much more condensed. The information provided is contained in Table 1.

Table 1 also contains two lines for scores that have been assigned to the general creditor friendliness of the national insolvency rules. It is often assumed that debtor (creditor) friendly insolvency laws lead to a higher (lower) number of insolvency cases – at least with respect to the number of those cases that are treated within the established procedure (and not outside, i.e. by mutual consent between debtor and creditor(s) and according to self-created rules). The assumption is plausible because a debtor friendly law establishes property rights that are advantageous for the debtor in terms of debt write-off and the possibility for a "fresh start". Thus, an enterprise under a debtor friendly law may have stronger incentives (or weaker disincentives) to fail, and a failed enterprise may more often use the existing regulations which are – in a sense – at its disposal.

We now compare the scores for creditor friendliness with Figures 2 and 3. The UK gets high scores for creditor friendliness by both sources *and* ranks low in terms of number of insolvencies. Also France fits well into the picture. Both sources regard the creditor friendliness as low *and* France has a relatively high level of insolvencies. For Germany, the sources are unanimous concerning the relatively high creditor friendliness of the German system (before the 1999 reform). However, the number of insolvency cases has been spurred not only since re-unification (under the old system) but also after the insolvency reform of 1999 and is presently third behind Sweden and France. The degree of creditor friendliness of the US system is assessed quite differently by the authors. While Wood gives a medium score, the other authors' score is much more on the debtor friendly side. However, US business insolvency cases are on a long-term decline and presently lowest of the countries in our sample (Figure 3).

It is also plausible to assume that the degree of creditor friendliness influences the recovery rate (last line in Table 1; see also Box 1). Again we have two sources. For the UK, France and Germany both sources are unanimous: the average recovery rate is highest in the UK and lowest in France – which corresponds well to the countries' degree of creditor/debtor friendliness. However, the US falls out of line in this case because a high recovery rate (according to the World Bank) coexists with a regime of low to medium creditor friendliness.

That recovery rates under debtor friendly rules are lower is plausible – but only at first glance, because creditors are able to adjust their lending behaviour accordingly. They can be more prudent, can demand higher collateral and can focus on those types of collateral that are not subject to dilution by preferential creditors. The latter type of collateral is, in the case of France, the debtor's receivables. Other collateral is at

Table 1

Business bankruptcy procedures, creditor friendliness and recovery rates in France, Germany, UK, and the US

	France	Germany	UK	US	
Main procedure, in national language	*Redressment judicaire*	*Insolvenzordnung* (the new code since 1999)	Administrative receivership	Chapter 11	Chapter 7
Bankruptcy trigger	Cessation of payments (inability to meet current liabilities)	Cessation of payments or overborrowing	Default (covenant breach)	No objective test. Also solvent firm may enter chapter 11	No objective test
Control rights	Court-appointed administrator	Creditors under court supervision	Secured creditor	Debtor, creditors collectively, bankruptcy court supervision	Trustee
Automatic stay	Unlimited	3 months	None	Unlimited	None
Super-priority financing	Yes	Creditor's approval required	None	Yes	None
Dilution of secured claims	Significant	Limited	None	Limited	None
Scores for creditor friendliness*					
LLSV (1 – 4):	0	3	4	1	n.a.
Wood (1 – 10):	1	8	9	6	n.a.
Recovery rate					
D & F, mean:	54%	61%	74%	n.a.	n.a.
D & F, median:	56%	67%	92%	n.a.	n.a.
World Bank:	48%	53%	85%	76%	n.a.

* Higher score means higher creditor friendliness.

Source for the verbal information: D & F: Davydenko and Franks (2005).
Source for the scores: LLSV: La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) and Wood (1995).
Source for the recovery rate: D & F: Davydenko and Franks (2005) and World Bank (2005).

the disposal of the insolvency courts and may be sold by them below the highest bid – in order to preserve employment. Davydenko and Franks (2005) show, first, that French banks, indeed, adjust to the debtor friendly environment. In comparison to the UK and to Germany, French banks demand more collateral per euro of debt and choose other types of collateral. Secondly, the authors point to the fact that the significantly different lending behaviour does, however, only mitigate, not eliminate, the differences in outcomes: recovery rates are lower and insolvencies more often in France than in the UK or Germany.

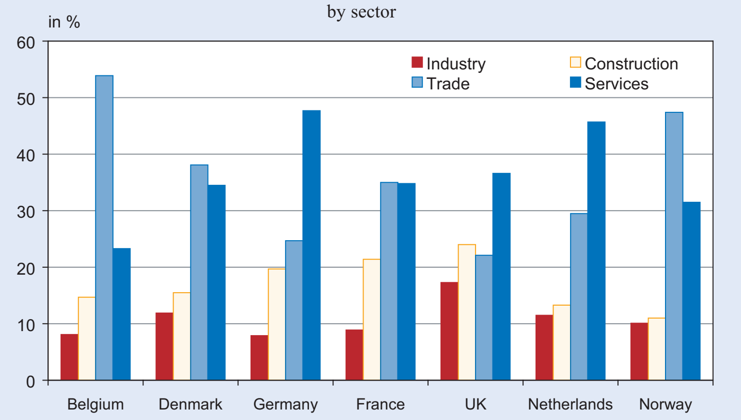
While Davydenko and Franks' analysis is based on a large number of insolvency cases studied in detail but occurred in three countries only, Claessens and Klapper (2005) study the insolvency rules and the number of bankruptcy filings of a large number of countries. The index of creditor rights they use has been developed by La Porta et al. (1998). It consists of 4 sub-indices: *restrictive reorganisation, mandatory management turnover, no automatic stay* and *secured creditors priority*. Claessens and Klapper come to the conclusion that the frequency of bankruptcy filings (1) does *not* clearly correlate with the level of creditor rights, (2) that there *is*, however, a positive correlation with an efficiently functioning general judicial system, and (3) with restrictions to reorganisation. They find (4) that bankruptcy filings are negatively correlated with no automatic stay – i.e., automatic stay of assets, as in the US under Chapter 11 (see Table 1), increases the frequency of filings.

The extraordinarily high level of business insolvencies in Sweden is explained by Buttwill (2004) partly with the high share of insolvencies of "zero employee enterprises". Such "enterprises" when failed are most probably counted as "individual insolvency" in the statistics of other countries. This also fits well with the fact that the official records of cases of individual insolvency are extremely low in Sweden (see below).

A further possible factor influencing the frequency of business insolvency is payment behaviour. As Creditreform (2006) reports, there are indeed considerable differences in payment behaviour across European countries (Table 2). Terms of credit plus delays of payment add up to an average of 89 days in Italy and to 37 days in Sweden. But again, the table

Figure 4

BUSINESS INSOLVENCIES, 2005
by sector



Source: Creditreform (2006).

Table 2

Payment behaviour in Europe

Country	Terms of credit plus factual delays of payment, in days
Italy	89
France	58
UK	54
Belgium	50
Switzerland	43
Austria	41
Netherlands	40
Germany	40
Sweden	37

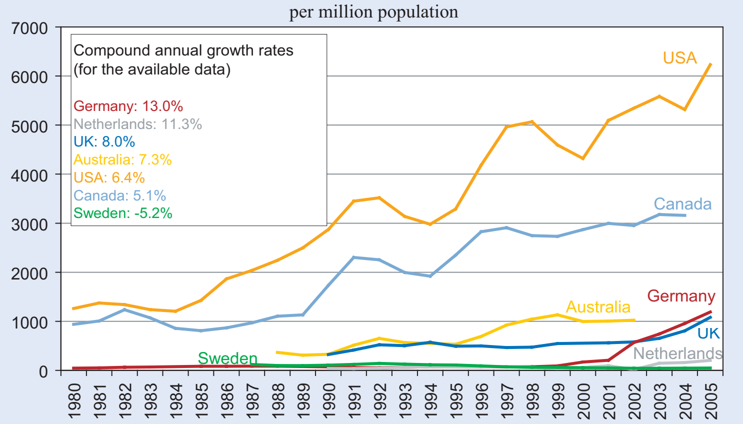
Source: Creditreform (2006, p. 12).

is only partly able to explain the different insolvency levels. Sweden and Switzerland (the latter not shown in the figures of this article), both with very high insolvency levels, rank low or middle in the number of credit and delay days.

The frequency of bankruptcy cases may also be influenced by the average size of enterprises, their size distribution, the available legal forms for enterprises and the sector structure of the economy. We only provide information about the sector structure of business insolvencies (Figure 4). This sector structure (for 2005) is remarkably similar between countries. In all countries considered *industry* insolvencies account for the lowest share of all insolvencies, while the highest frequency of insolvencies occurs either in the *service* or the *trade* sector. The *construction* sector, however, contrary to the anecdotal evidence, is not a leading insolvency sector but is on the second lowest rank in all countries (except UK).

Figure 5

INDIVIDUAL INSOLVENCIES, 1980–2005
per million population



Source: see Table1.

Personal insolvencies

As we have seen, the driving factor behind the general growth dynamics of total insolvencies, depicted in Figure 1, cannot be business insolvency, because this type of insolvency does not exhibit a significantly increasing trend in most countries (see Figure 2). Figure 5 shows that the decisive factor for the overall growth trends as well as for the differences of insolvency levels across countries is individual insolvency. Compound annual growth rates of individual insolvencies are considerably higher than those of total insolvencies. Germany and the Netherlands lead the list with 2-digit growth rates, while the US and Canada are on lower ranks.

The levels of individual insolvencies per million population reached in 2005 are very different. The highest figure by far occurs in the US, while Canada follows at quite a distance. Germany, UK and Australia, being next in ranking, have individual insolvency cases of only about 15 percent of the US level. The contrast between levels of business and of individual insolvencies is most striking in the US and Sweden. While the US in 2005 exhibits the lowest level of business insolvencies (Figure 3), its level of individual insolvencies is highest. In Sweden it is just the other way round: the Swedish level of business insolvencies is highest, but the level of individual insolvencies is lowest – and even declining (annual compound growth of –5.5 percent).

Figure 6, without the US and Canada, allows a closer look at the interesting case of Germany, where the insolvency figures have been exploding since 2001. The reform of the insolvency procedure in 1999 had also introduced the possibility of debt cancellation for insolvent non-business individuals. Immediately, the insolvency figures reacted and doubled within two years. A virtual explosion started after the new law was reformed in 2001. The annual compound growth rate for 1999–2005 is more than 40 percent in the case of Germany.

To explain the general trend of steep increases in individual (or: consumer) insolvency, two main factors have been identified. First, consumer debt, mostly unsecured, developed dramatically in industrial countries. This is mainly due to technical developments as well as legal deregulation in the capital markets (Tabb 2005). Second, an important aspect of any (modern, in contrast to medieval or nineteenth century) insolvency law is debt discharge. If a law exists that permits such a discharge, it will be used by the debtors.

Box 3 provides information on the introduction of individual insolvency laws and their reforms across industrial countries. Since 1984, as Tabb (2005) observes, a virtual wave of individual insolvency laws has occurred. In nearly all cases, a debtor friendly legislation has been introduced or the existing laws have been made more debtor friendly. The exceptions seem to be only the US and Canada. Already for more than a hundred years (since 1898) the US had a generous (i.e., debtor friendly) individual insolvency law. It had been modified several times in order to limit abuse, but provided, until recently, "… broad access to an immediate and unconditional discharge of debts, unhampered even by a corresponding requirement of future income contribution" (Tabb 2005, p. 2). It is only the 2005 reform in the US and the 1997 reform in Canada that has taken significant steps in the direction of reduced debtor friendliness. Thus, two opposing trends are observable: generous laws are made less generous (more restrictive), restrictive laws (as until recently in most countries) are made more generous for the debtor.

Box 3

Individual insolvency legislation since 1984

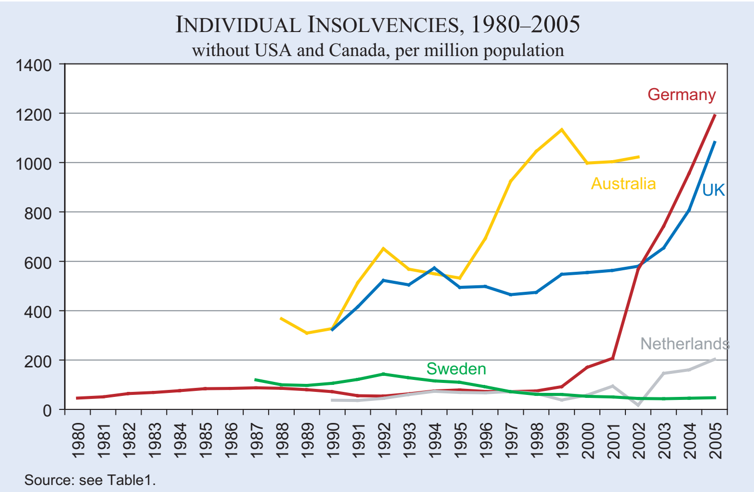
1984	Denmark, United States
1985	Scotland
1986	England and Wales
1989	France
1992	Canada, Norway
1993	Finland
1994	Austria, Germany, Sweden, United States
1996	Hong Kong, Israel
1997	Canada, Netherlands
1998	Belgium
1999	Germany
2000	Luxembourg
2001	Germany
2002	Australia, England and Wales
2005	United States

Source: Tabb, 2005.

Opportunistic behaviour, social welfare

It is plausible to assume that the possibility of debt discharge leads to opportunistic behaviour – by enterprises and by individuals. The unprecedented steep increase in individual insolvencies immediately after the introduction of a debt discharge legislation, as is the case for instance in Germany, cannot sufficiently be explained by rising unemployment (in Germany: stagnating, albeit at a high level), rising interest rates (stagnating at a low level) or rising consumer debt (much less increase). Tabb (2005), however, refers to such considerations as an "'abuse' mantra" (p. 7), pointing to a number of studies which have tried to call into question a significant occurrence of opportunistic behaviour of consumers seeking easy debt dis-

Figure 6



charge. Zywicki (2005), by contrast, regards the view that household overindebtedness is caused by overlending of banks and adverse income shocks due to unemployment or health problems as the "traditional model" that can no longer satisfactorily explain the consumer bankruptcy trends. He concludes: "Individuals increasingly appear to be *choosing* (italics in the original, R.O.) to file for bankruptcy as a response to financial distress, rather than reducing spending or tapping savings to avoid bankruptcy" (p. 2).

The possibility of an individual debt discharge can be regarded as consumer insurance because it smooths consumption paths over time. Grant and Koeniger (2005) set this in relation to redistributive taxation and to public welfare programmes, both of which also smooth consumption paths. (The relation between redistributive taxation and social insurance was explored already in 1980 by Varian.) For the US, with state level data, the authors try to show that redistributive taxation and debt discharge legislation are substitutes, not complements. They even identify a "policy trade-off in that bankruptcy exemption (i.e., debtor's assets exempted from payment obligations, R.O.) is less effective in increasing welfare if redistributive taxation is already pronounced" (p. 29). They go on to set the recent wave of individual insolvency laws in Europe in perspective to the already existing substantial public assistance programmes in Europe and conclude that, from a social welfare point of view, "the additional insurance provided by these reforms is unlikely to be important … in these European countries" (p. 30).

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Sustainability of Fiscal Policy in the EU-15

António Afonso*

Fiscal sustainability is a recurrent topic that countries ponder with some regularity. At the beginning of the 1920s, when writing about France's public debt problem, Keynes (1923, p. 24) mentioned the need for the French government to conduct a sustainable fiscal policy in order to satisfy its budget constraint. Keynes stated that the absence of sustainability would be evident when "the state's contractual liabilities (…) have reached an excessive proportion of the national income". In modern terms, there is a problem of sustainability when government revenues are not sufficient to keep on financing the costs associated with the new issuance of public debt or, in Keynes's words, when "it has become clear that the claims of the bond-holders are more than the tax payers can support" (p. 55).

In the last two decades several developed countries have experienced difficulties coping with budget deficits, and accordingly economists are examining the issue more closely. This is an important topic both in terms of economics and public policy. The issue is paramount notably for the euro area since equilibrium growth paths and the single monetary policy need to be supported by adequate and sound fiscal policy.

Furthermore, the treaties governing the European Union impose the practical necessity of sustainable public accounts. For instance, it is possible to assess sustainable public finances in terms of compliance with the budgetary requirements of the European Monetary Union, i.e. avoiding excessive deficits, keeping debt levels below the 60 percent of GDP reference value, and respecting the "close to balance or in surplus" requirement of the Stability and Growth Pact (SGP). From a forward-looking perspective, one may also notice that the SGP imposes commitments on member states for budgetary positions in the medium-term. Therefore, sustainability could be de facto ensured, provided budget balances respect a "close to balance or in surplus" target.

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The issue of sustainability

Fiscal policy sustainability is sometimes associated with the financial solvency of the government. In practice, however, what the empirical literature ends up testing is whether both public expenditures and government revenues will continue to display their historical growth patterns in the future. If a given fiscal policy turns out to be unsustainable, it has to change in order to guarantee that the future primary balances are consistent with government budget constraint, essentially the relation between government assets and liabilities in any period in time.

Theoretically any value for the budget deficit would be possible if the government could raise its liabilities without limit. Obviously, that is not feasible since the government is faced with the possibility that, at some point, the public may refuse to buy more government debt or demand too high an interest rate on it. It also is worth noticing that the hypothesis of fiscal policy sustainability is related to the condition that the trajectory of the main macroeconomic variables is not affected by the choice between the issuance of public debt and the increase in taxation. Under certain conditions, it would be irrelevant how the deficits are financed, implying the assumption of the Ricardian Equivalence hypothesis, as stated already in the early nineteenth century by David Ricardo (1820).[1]

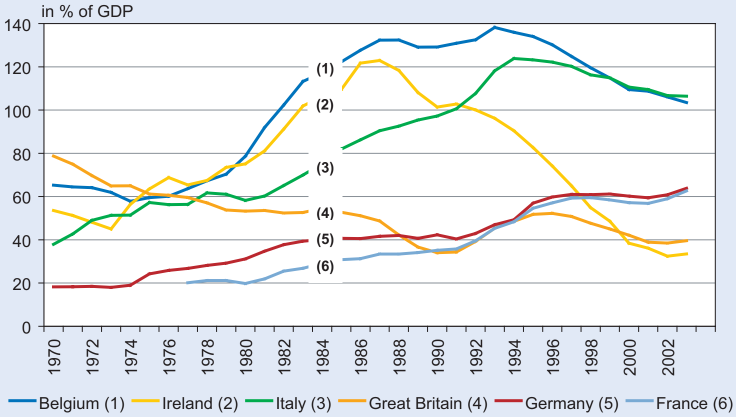
In more technical terms, a sustainable fiscal policy should ensure that the present value of the stock of public debt goes to zero in infinity. This would mean that the present value of the existing stock of public debt will be identical to the present value of future primary surpluses. In other words, it implies imposing the absence of Ponzi games and the fulfilment of the so-called intertemporal budget constraint.[2] Faced with this condition, governments will have to achieve future primary surpluses whose present value adds up to the current value of the stock of public debt. Put still another way, public debt in real terms cannot increase indefinitely at a growth rate beyond the real interest rate, and the government cannot play Ponzi games forever.[3]

[1] In a related context, governments can also be labelled "Ricardian" if they behave in a fiscally disciplined way. See Afonso (2005b) for a related discussion and empirical evidence for the EU.
[2] In the 1920s, Charles Ponzi swindled several Boston investors, offering them high returns, which in the beginning he would pay with the money collected from new investors. Needless to say, Ponzi ended up being arrested when he no longer was able to pay his debts. He died a poor man.
[3] McCallum (1984) discusses this as a necessary condition to get an optimal trajectory for the stock of debt.

How to assess the sustainability of fiscal policy

A common practice in the literature is to investigate past fiscal data to see if government debt follows a stationary process or to establish if there is co-integration between government revenues and government expenditures, that is, if revenues and expenditures move closely together in an almost one-to-one relationship.[4]

Figure 1



Source: Afonso (2005a), data from the AMECO database.

Therefore the procedure to assess the sustainability of the intertemporal government budget constraint involves testing the following co-integration regression between revenues, R, and spending, G:$R_t = a + bG_t + u_t$. Several conclusions may then be established:[5]

i) When there is no co-integration, the fiscal deficit is not sustainable,

ii) When there is co-integration with $b=1$, the deficit is sustainable,

iii) When there is co-integration, with $b < 1$, government expenditures grow faster than government revenues, and the deficit may not be sustainable.[6]

Some stylised fiscal facts in the EU-15

It seems relevant to mention some stylised facts on government debt developments for the EU-15 countries.[7] Between the beginning of the 1970s and the end of the 1990s the debt-to-GDP ratio exhibited an increasing trend for most countries throughout the period. For instance, general government debt increased in Italy from 37.9 percent of GDP in 1970, to 110.6 percent of GDP in 2000. In Germany the debt-to-GDP ratio was 18.2 percent in 1970 and went beyond the 60 percent level in 1997. According to European Commission data, in 2003 three countries still had a debt-to-GDP ratio above 100 percent (Italy, Belgium and Greece), while in three other countries the debt ratio was higher than 60 percent (Austria, Germany and France).

In the period 1970–2003 the highest debt-to-GDP ratios were reported in Italy and Belgium (the country with the highest debt-to-GDP ratio in that period), and their high debt service payments induced substantial budget deficits despite primary budget surpluses. A reversal of that general trend is noticeable only at the end of the 1990s, as the several “more indebted” countries tried to fulfil or at least come closer to the Maastricht debt criterion.

The consequences of choosing different fiscal policies may be exemplified by looking, for instance, at the public debt paths of some of the EU countries, as depicted in Figure 1. For instance, the adding-up of successive and significant budget deficits in Italy and in Belgium had a clearly identifiable impact on government debt, with the debt-to-GDP ratio rising steadily until the middle of the 1990s. Germany and France also exhibited a slowly growing debt ratio throughout the 1980s and 1990s. On the other hand, the debt ratio in the UK followed an overall downward path, while Ireland changed from being a high debt country in the 1980s to a “less indebted” country in the 1990s.

With regard to government expenditures and revenues, the main conclusion seems to be that the burden of public expenditures and revenues on GDP has increased since the 1970s in almost every coun-

[4] Assuming that government revenues and expenditures are non-stationary variables and that their first differences are stationary variables, this implies that both series in levels are integrated of order one. Therefore, these two variables should be co-integrated with co-integration vector (1, –1) to ensure stationarity. See Hamilton and Flavin (1986), Trehan and Walsh (1991), and Hakkio and Rush (1991).
[5] See Afonso (2005a), for a more detailed technical presentation.
[6] Hakkio and Rush (1991) demonstrate that if G and R are non-stationary variables in levels, the condition $0 < b < 1$ is a sufficient condition for the budget constraint to hold. However, when revenues and expenditures are expressed as a percentage of GDP or in per capita terms, it is necessary to have $b = 1$ in order for the trajectory of the debt to GDP not to diverge in an infinite horizon. Quintos (1995) and Ahmed and Rogers (1995) further discuss the necessary conditions for sustainability in terms of the order of integration of public debt.
[7] Notice that only explicit government debt is considered. Indeed, implicit debt is outside the scope of the analysis since methods for computing it, notably future pension-related liabilities, are far from consensual in the literature and are quite dependent on the assumed hypothesis.

try. Another stylised fact is that between 1970 and 2003, the ratio of government expenditures to GDP, for most countries, exhibited a higher growth rate than the ratio of government revenues to GDP. This conclusion holds for all countries except for Belgium, Ireland and Italy. This increase in total expenditures must be seen against a background where governments gradually tried to focus economic policy towards a better fulfilment of the usually defined "Musgravian" goals: macroeconomic stabilisation, income redistribution and more efficient resource allocation. In fact, it was during the 1970s and 1980s that most industrialised countries increased the coverage of social programmes, such as unemployment insurance.

Fiscal sustainability in the EU-15: evidence from government debt

Afonso (2005a) applied unit root tests to the stock of real public debt for the period 1970–2003, also taking into account the fact that there may be structural breaks in the debt series. For instance, this could be the case for Germany due to reunification in 1990. Therefore, following a recursive approach, the null hypothesis that the debt series has a unit root can be tested against the alternative of stationarity with structural change at some unknown break date chosen endogenously. Table 1 summarises results for the existence of stationarity in the debt series, alongside with the detected break dates.

The results allow for the rejection of the unit root hypothesis, therefore the existence of sustainability may be possible for Austria, Finland, Germany, Sweden and the UK, using the overall results of both reported tests. However, in general there is not much evidence against the unit-root hypothesis for most of the debt series in the EU-15 countries; in other words the sustainability hypothesis is mostly not supported.

Interestingly, most of the breaks reported in Table 1 seem to cluster in the 1990s and more specifically in the first half of the decade, notably Austria in 1991/92, Finland in 1990/91 and Germany in 1993/94. One can also mention that, for instance, in Finland the debt-to-GDP ratio increased by more than threefold between 1990 and 1992 (while there was a severe recession in 1991/92). On the other hand, the estimated break date for Germany occurs only in 1993.

One should also notice that the number of observations used is only 33 at most, and the accuracy problems of unit root tests with small samples are well known. However, the alternative approach of using quarterly data would constrain the time period, so that it is usually preferable to use a longer sample of annual data instead of more observations along a smaller time span. Furthermore, the rejection of the stationarity hypothesis does not mean that public accounts are not sustainable. Indeed, the stationarity of the variation of the stock of public debt is a sufficient condition, and stationarity rejection does not necessarily imply the absence of sustainability in the government accounts.[8]

Table 1
Test results for sustainability in general government debt

Country	Period	Zivot and Andrews test		Perron test	
		Break date	Sustain-ability	Break date	Sustain-ability
Austria	1970–2003	1992	Yes	1991	No
Belgium	1970–2003	1991	No	1988	No
Denmark	1971–2003	1993	No	1989	No
Finland	1970–2003	1991	Yes	1990	Yes
France	1977–2003	1988	No	1988	No
Germany	1970–2003	1994	No	1993	Yes
Greece	1970–2003	1978	No	1991	No
Ireland	1970–2003	1985	No	1984	No
Italy	1970–2003	1991	No	1990	No
Luxembourg	1970–2003	1986	No	2000	No
Netherlands	1975–2003	1991	No	1986	No
Portugal	1973–2003	1984	No	1991	No
Spain	1970–2003	1992	No	1991	No
Sweden	1970–2003	1997	No	1999	Yes
United Kingdom	1970–2003	1987	Yes	1986	Yes

Source: Afonso (2005a).

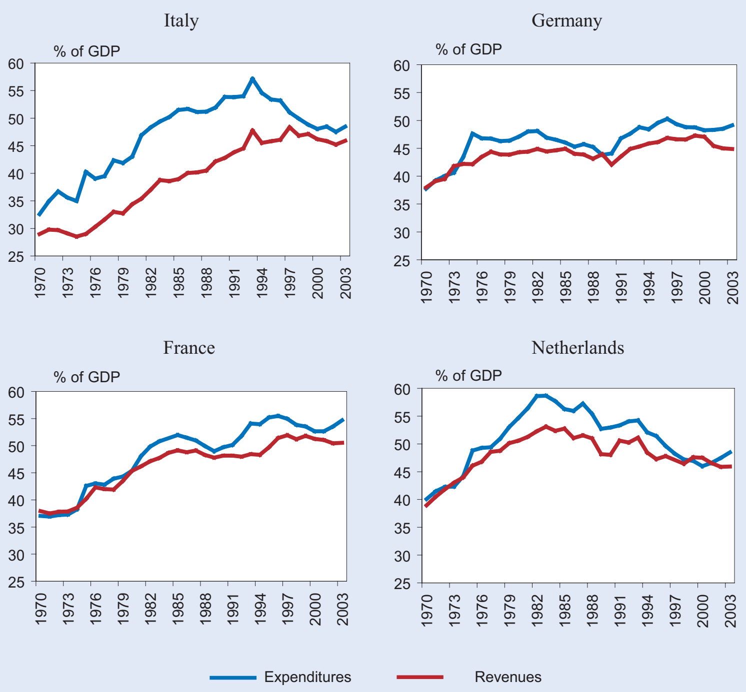
Fiscal sustainability in the EU-15: evidence from total revenues and expenditures

Visual inspection of the revenue and expenditure time series for a given country may provide an early clue regarding fiscal sustainability. This is exemplified in Figure 2, which depicts government expenditures and revenues, as a percentage of GDP, for Italy, Germany, France and the Netherlands. One suspects in advance that Italy and France may not pass the sustainability tests.

[8] See Trehan and Walsh (1991).

Figure 2

GOVERNMENT EXPENDITURE AND REVENUES



Source: Afonso (2005a), data from the AMECO database.

Table 2 reports the results of co-integration tests performed with the government revenues and expenditures as a percentage of GDP (only for the cases where there is a significant co-integrating relation).

According to such results, it seems possible to reject the hypothesis of fiscal policy sustainability for the majority of the countries. Indeed, only for Austria, Germany, Finland, Netherlands and Portugal is there a significant co-integration relationship between revenue and expenditure. However, even then the estimated coefficients for expenditures, where government revenues are the dependent variable, are always less than one. As a matter of fact, for each one percentage point of GDP increase in public expenditures, for instance, in the Netherlands and in Germany, public revenues only increase respectively by 0.634 and 0.521 percentage points of GDP. Notice that these two countries are the ones where the estimated coefficient b in the co-integrating relationship has the highest absolute value. For the other countries where a significant co-integration relation was found, b is much lower in absolute value.

In other words, for the period 1970–2003, government expenditures in the above-mentioned countries exhibited a higher growth rate than public revenues, challenging therefore the hypothesis of fiscal policy sustainability. These results suggest that fiscal policy may not have been sustainable for most countries, with the possible exceptions of Germany and the Netherlands.

Table 2

Co-integration of government revenues and expenditures (dependent variable: revenues)

Country	Co-integration relation	
	Engle-Granger	Johansen
Austria	[1 –0.380]***	[1 –0.418]**
Germany	[1 –0.521]**	[1 –0.629]**
Finland	[1 –0.343]**	[1 –0.368]*
Netherlands	[1 –0.634]**	[1 –0.665]**
Portugal	[1 –0.205]***	[1 –0.174]***

Notes: The symbols *, ** and *** denote statistical significance at the 10%, 5%, and 1% level, respectively. Only co-integrating relations with at least a 10% significance level are reported.

Source: Afonso (2005a).

Conclusion

The fiscal policy sustainability issue was discussed in this note, using the government budget constraint as the key element of the analysis for the EU-15. Formally, such constraint requires that all future net tax revenues (i.e. tax revenues less transfers of current and all future generations measured in present value terms) are enough to cover the present value of future government consumption and to service the existing stock of government debt.

With few exceptions, EU-15 governments might have sustainability problems, although debt-to-GDP ratios showed signs of stabilising at the end of the 1990s. Using government expenditures and revenues as a percentage of GDP, a co-integration relation was identified for Austria, Germany, Finland, the Netherlands and Portugal. However, the estimated coefficients for expenditures in the co-integration equations for those countries, where public revenue is the dependent variable, are less than one.

Overall, the reported results are comparable with the ones from some of the existing cross-country literature and might be considered "unpleasant" from a policy-maker's point of view.[9] A small number of countries seems to emerge as less likely to exhibit sustainability problems, namely Germany, the Netherlands, Finland and Austria. Of these, Germany and the Netherlands almost always appear less likely to have sustainability problems. The results presented also show that even for these two countries the absolute value of the relevant estimated coefficient in the co-integration relation is quite below unity, implying that their fiscal positions may not be sustainable.

Therefore, the aforementioned countries face the problem of having a higher growth rate for expenditures than the growth rate of revenues. In other words, if fiscal policy were to be conducted in the future as it was in the past, there could be some problems ahead, even for this set of countries that started, early in the 1990s, to make efforts in order to meet strict budgetary criteria. This problem may even become more critical in the light of available projections for the EU15 countries, concerning future public financial responsibilities. As a matter of fact, the EC (2001) reported that ageing populations could lead to increased expenditure on public pensions by between 3 and 5 percentage points of GDP in most member states, with larger increases in several countries. Moreover, fiscal developments during the period 2001–2003 in several EU15 countries do not seem reassuring in terms of sustainability of public finances.

Since population shifts towards older societies is an entirely new phenomenon, it cannot be considered in econometric results based exclusively on past data. This does not constitute a general criticism against purely econometric methods of measuring fiscal sustainability but is instead an argument for expanding the database. Indeed, implicit public pension liabilities, as part of a country's global fiscal imbalance, have to be understood as future borrowing requirements, not fully embedded in the public fiscal figures, leading therefore to added sustainability problems.[10]

Finally, these results, as most of the results reported in the literature, are obtained without considering additional sources of government revenues, for instance privatisation revenues. Information on privatisation revenues is not easily available for the EU-15 countries. Additionally, government assets (wealth) should be taken into account to make judgements about the sustainability of public finances (even though data are mostly lacking).

[9] Afonso (2005a) surveys existing results.
[10] For a review of this topic see, for instance, EC (2001) and EPC (2003).

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Financing the EU budget – Present Situation and Perspectives

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Astrid Lemmer*

The European Council agreed on the new medium-term planning for financing the European Union between 2007 and 2013 in December 2005.[1] The financial planning involves decisions on the level and structure of future expenditure and on the rules how this expenditure is to be financed.

EU expenditure

The annual ceiling for EU budget expenditure ("payment appropriations") is currently 1.24 percent of the gross national income (GNI) of all member states. The member states' financial contributions can be set and collected only up to this amount. In 2004 the total sum actually spent amounted to €100.1 billion, which, as in previous years, was 0.98 percent of GNI, significantly less than the annual ceiling (Tables 1 and 2). While this represents a 10.6 percent increase in total expenditure compared with that of 2003, most of the increase was due to the EU enlargement on 1 May 2004. Almost 7.5 percentage points of the growth of nearly 11 percent of the allocable expenditure burden shared by the individual member states were due to the new member states.[2] However, the increase in expenditure resulting from enlargement was considerably restricted by virtue of an agreement on transition regulations. For example, a ceiling of €22 billion was set for structural aid to the new member states for the years between 2004 and 2006. Moreover, the farmers there received just 25 percent of the usual direct payments in the first year (30 percent in 2005). The full amount of financial support will not be paid until the end of a transitional period of ten years.[3]

Expenditure may be subdivided into three main categories (Figure 1). Agriculture, despite a significant

* This article is a condensed and updated version of Deutsche Bundesbank (2005), pp 15. The authors are economists at Deutsche Bundesbank, Economics Department, Public Finances.

[1] However, the European Parliament failed to agree to this proposal in January 2006.

[2] For the statistics see European Commission (2005).

[3] Owing to these measures, net transfers to the new member states in 2004 were limited to a total of approximately €3 billion.

Table 1

Total EU expenditure and receipts (funds for payments)

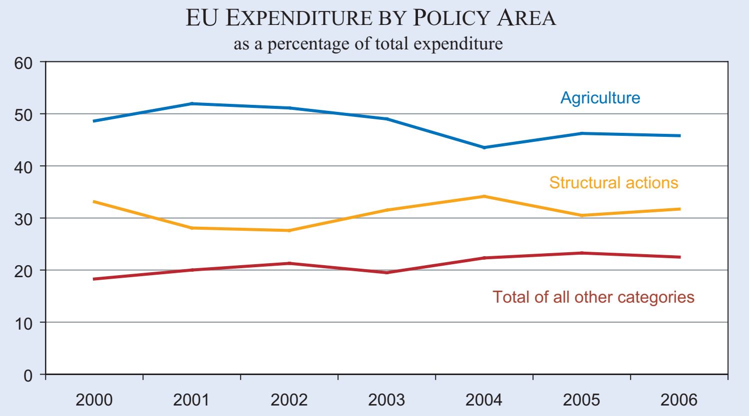
in € billions unless shown as a percentage

Item	1999	2000	2001	2002	2003	2004	2005[a]	2006[a]
Expenditure								
Agriculture	39.8	40.5	41.5	43.5	44.4	43.6	48.5	51.0
Structural actions	26.7	27.6	22.5	23.5	28.5	34.2	32.4	35.6
Internal policies	4.5	5.4	5.3	6.6	5.7	7.3	8.0	8.9
External policies	4.6	3.8	4.2	4.4	4.3	4.6	5.5	5.4
Reserves	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.5
Pre-accession strategy[b]	–	1.2	1.4	1.8	2.2	4.5	4.6	4.0
Administration	4.5	4.6	4.9	5.2	5.3	5.9	6.3	6.7
Total	80.3	83.3	80.0	85.1	90.6	100.1	105.7	112.0
Percentage change from previous year	–0.5	3.8	–4.0	6.4	6.4	10.6	5.5	6.0
Memo Item: percentage of GNI	1.00	0.98	0.91	0.93	0.98	0.98	1.00	1.01
Receipts								
Traditional own resources[c]	13.9	15.3	14.6	9.2	10.9	12.3	13.9	14.2
VAT-based own resource	31.3	35.2	31.3	22.4	21.3	13.9	15.6	15.9
GNI-based own resource	37.5	37.6	34.9	45.9	51.2	69.0	68.9	80.6
Other receipts[d]	4.2	4.7	13.5	17.9	10.1	8.3	7.3	1.3
Total	86.9	92.7	94.3	95.4	93.5	103.5	105.7	112.0
Percentage change from previous year	2.8	6.7	1.7	1.2	–2.1	10.7	2.7	6.0
Balance for the financial year	6,6	9.4	14.3	10.3	2.9	3.4	0.0	0.0

[a] Budget (funds for payments) for the EU 25. 2005: Amending budget 1,2,3,4,5,6,7 and 8 included. – [b] Including compensation payments for the new member states. – [c] Net, i.e., less the refund paid to member states for collection expenses. In the financial year 2002 the lump-sum refund paid to member states for this purpose was raised from 10% to 25% of the amount member states contributed to the EU. – [d] Including residual surpluses from the previous financial year.

Source: European Commission (2005) and own calculations.

Figure 1



Data for 2005 and 2006 includes supplementary budgets and correction budgets.

Source: European Commission (2005).

ber states in terms of GNI per capita, it still receives far more than the average amount of structural funds, albeit considerably less than the three southern European countries.

reduction from just over 49 percent in 2003 to 43.5 percent in 2004, continued to account for the largest share of total EU expenditure (€43.6 billion in 2004 compared with €44.4 billion in 2003). Furthermore, rising expenditure on structural actions was also significant (just over 34 percent, or €34.2 billion compared with €28.5 billion a year earlier). Just over 7 percent (€7.3 billion) was spent on "internal policies" – such as education, energy and environment or trans-European networks. Pre-accession aid for the new member states accounted for 4.5 percent.

In regional respects, the EU budget is disproportionately spent. The United Kingdom, the Netherlands, Sweden and Germany receive relatively little funding as a percentage of their respective GNI.[4] By far the biggest recipients of EU funds, however, are the Baltic states as well as Greece and Portugal. A further breakdown of the expenditure side illustrates, for example, that, of the old member states, the (in relative terms) largest recipients of agricultural subsidies and structural funds are still Greece, Portugal, Ireland and Spain. Ireland received 1.5 percent of its GNI in the form of agricultural subsidies in 2004 – surpassed only by Greece. Even though Ireland is now one of the most prosperous of the EU mem-

Financing

The EU's expenditure is largely covered by its own resources (Figures 2 and 3).[5] These include traditional own resources which consist primarily of customs duties (2004: just under 12 percent of total income), value-added-tax-based own resources, which is collected from the member states on the basis of a harmonised assessment base (13.5 percent), and GNI-based own resources (just over 66.5 percent).[6]

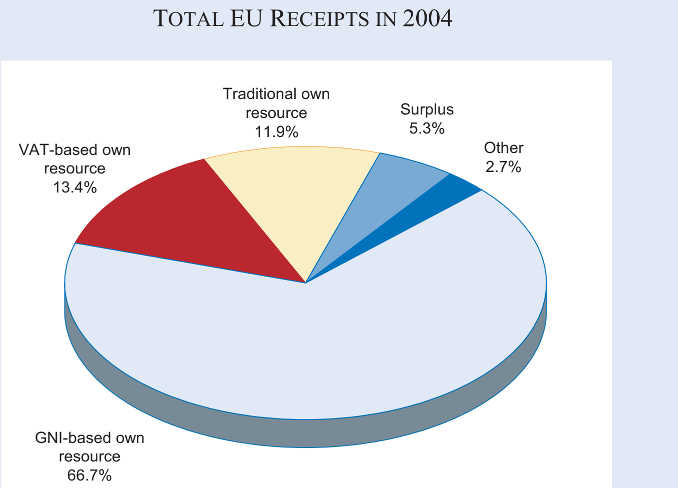
The United Kingdom receives a refund of 66 percent of its actual net contribution (excluding traditional own resources) as a result of an agreement which was concluded in 1985. The contribution made by the other member states to finance this correction is

[4] As the ten new member states did not join the EU until 1 May 2004, only two-thirds of each member state's GNI was used in the EU budget as a basis for determining the amounts of VAT-based own resources and GNI-based own resources that they had to contribute. By analogy, only two-thirds of the new member states' GNI is taken into account here.

[5] Financing the EU budget by borrowing is legally forbidden. Planned receipts and expenditure must be completely matched. Any surplus is to be shown on the receipts side in the following financial year. Any unforeseen expenditure requires an amendment to the budget.

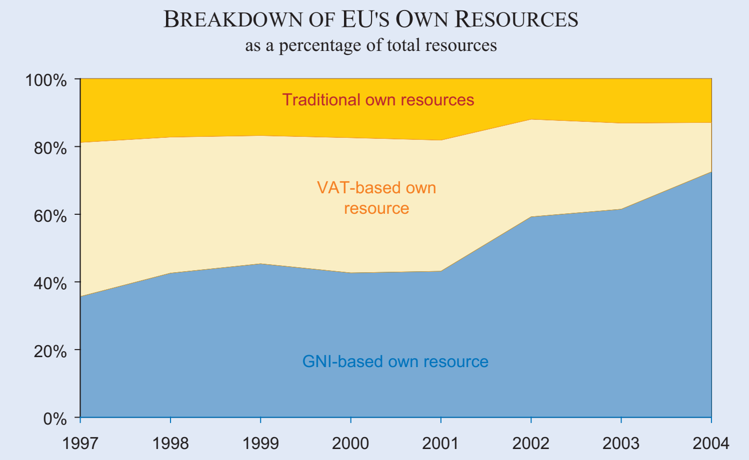
[6] The reduction in VAT-based own resources and the simultaneous increase in GNI-based own resources that have occurred since 2002 are the result of an agreement reached by the European Council in March 1999 (Agenda 2000). This initially lowered the maximum levy rate for VAT-based own resources from 1.0 percent to 0.75 percent (2002 and 2003) and then from 2004 to 0.5 percent of the harmonised VAT assessment base (see Figure 3).

Figure 2



Source: see Figure 1.

Figure 3



Source: see Figure 1.

Although the figures for net contributions are informative and play an important political role, they should be put in perspective. Inaccuracies arise because some of the receipts – such as customs duties (as part of the traditional own resources), which are concentrated in a few countries with major ports, especially the Netherlands and Belgium ("Antwerp-Rotterdam effect"), and also various types of expenditure, such as expenditure on administration that is heavily concentrated in Belgium and Luxembourg – cannot be allocated to specific member states with any certainty and are therefore neglected.[9] The EU also makes payments within the framework of its external actions, which do not accrue to EU member states and therefore do not represent allocable expenditure. Therefore, the figures presented here exclude the traditional own resources on the receipts side as

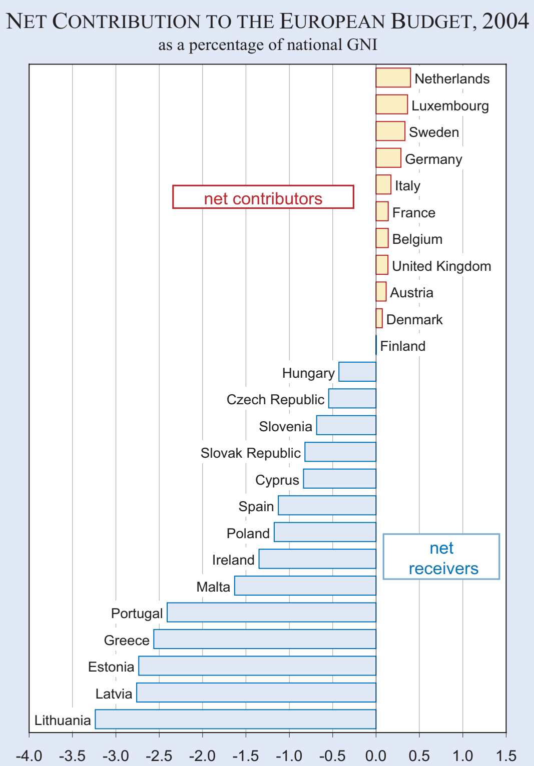
again based on their national GNI. Since 2001, Germany, the Netherlands, Austria and Sweden have been paying only 25 percent of the resultant correction contributions with all other member states paying a correspondingly larger amount.[7] In absolute terms, the correction in 2004 meant just over €5 billion in financial relief to the United Kingdom.[8]

Net contribution

With a net contribution of 0.4 percent of its GNI the Netherlands was the largest net financier of the EU budget in 2004 in terms of economic strength followed by Luxembourg (just under 0.4 percent of GNI), Sweden (just over 0.3 percent) and Germany (0.3 percent). The largest net recipients, on the other hand, were the Baltic states, Lithuania, Latvia and Estonia, as well as Greece and Portugal (Figure 4).

Obviously the expenditure side determines the respective net position, whereas the budget contribution is raised largely proportionally to national wealth in terms of GNI. The advantageous net receiver position of the new member states in 2004 is not so much a result of the traditional areas of EU budget expenditure as of the pre-accession bridging aid granted to the accession countries (almost 1.1 percent of the GNI of the ten accession countries).

Figure 4



Note: Traditional own resources and administrative expenditures are not included in the calculation of net contribution rates.
Source: see Figure 1.

[7] Previously, Germany alone had been relieved of one-third of its actual payments under the correction agreement in favour of the United Kingdom.
[8] In 1999 (Agenda 2000) the European Council decided that the commission had to undertake a general review of the financing system by 1 January 2006. The commission suggested a general correction mechanism to avoid unusually large net contributions by member states. However, in the European Council conclusion on the financial perspective 2007 to 2013 no agreement on a general reform of the system was found.

[9] For the informative value of net contributions see Deutsche Bundesbank (1999), p. 65.

well as the cost of administration and external actions on the expenditure side.

EU budget in 2005 and 2006

The budget for the year 2005 (Table 1) provides for expenditure of €105.7 billion, which is equal to 1.0 percent of EU-25 GNI. Given an increase in total expenditure of 5.5 percent, expenditure on agriculture and rural development will be €4.9 billion (or 11 percent) higher than in the previous year's budget. This is due not only to the increase in direct assistance for the new member states but also to the effects of the reform of the Common Agricultural Policy, according to which there is to be a particularly sharp rise in the funds available for developing the countryside. In the overall budget plan for 2006 a further rise in expenditure on agriculture of more than 5 percent to €51.0 billion out of a total expenditure volume of €112.0 billion (or 1.01 percent of the EU 25 GNI) is planned.[10] The funds allowed for structural actions in the 2005 budget plan were almost 5.5 percent below those in the previous year. In contrast to the plan for 2005, expenditure for structural actions is again to be raised by 10 percent to €35.6 billion in 2006.

Planning for the years 2007 to 2013

How the member states' linkage to the EU budget continues to develop is determined essentially by the new financial perspective for 2007 to 2013.[11] According to the agreement achieved by the European Council in December 2005, payment appropriations which have to be met from the member states' contributions should start at a maximum of 1.06 percent of GNI in 2007 and 2008 but are planned to decrease later on to 0.94 percent in the final year 2013 (Table 2). On average, payment appropriations will amount to 0.99 percent of GNI between 2007 and 2013. Over the planning period, the total figure for expenditure of EU 27 is €862.4 billion in appropriation commitments (1.04 percent of EU GNI).

According to the UK Presidency's proposal, expenditure on internal policies (citizenship of the union) and external actions (EU as a global player) is to rise between 2007 and 2013 by an annual average of almost 9.5 percent or just under 4.5 percent, respectively. From a financial point of view, however, this is of minor importance compared with the expenditure earmarked for agriculture and structural actions.

Common Agricultural Policy

In the new financial perspective, expenditure on the common agricultural policy (CAP), which still absorbs the lion's share of the EU budget, is to form the largest section under the new heading "preservation and management of natural resources". In real terms, expenditure on the CAP is to decline slightly although the direct payments to farmers in the new member states that are unrelated to output are to rise continually over the coming years. This means that until 2013 the budgeted share of expenditure on the agricultural sector should drop to 40.5 percent, which would then be clearly below the share of funds spent on general structural actions (45.5 percent).

This downturn in expenditure in the agricultural sector is based on the Luxembourg resolutions on the reform of the CAP of June 2003. The key element of this is the decoupling of direct payments from production. Another element of the reform is the linking of direct payments to the observance of additional specifications ("cross-compliance"). The subsidy is paid only if the farmer maintains certain minimum standards, mainly with respect to environmental protection. The purpose of the strengthened rural development policy[12] ("pillar 2") under the reformed CAP is to help to achieve these objectives. Furthermore, provision has been made to redirect funds from the areas of market policy and direct payments ("pillar 1") to rural development ("modulation").

The accentuated market orientation that is enshrined in the Luxembourg resolutions and is to be achieved by changing over to direct payments that are not linked to production and by reducing intervention prices could help to weaken the misguided incentives to deploy excessive resources.[13] However, more radical measures would be appropriate within

[10] See Table 1 for figures related to the former categories. As new categories are implemented, the figures become difficult to compare.

[11] The financial perspective is a multi-annual financial framework for EU expenditure. It is therefore of a binding nature in that the expenditure ceilings for the individual headings are to be observed. The financial perspective is unanimously agreed by the European Parliament, the Council and the Commission ("Inter-institutional Agreement"). Detailed budgetary plans are to be approved for each of the years in question.

[12] The (new) rural development policy was excluded, by virtue of the Commission's proposal on the financial perspective, from the "structural actions" and allocated to agriculture.

[13] See OECD (2004).

Table 2

Financial perspective for the EU budget, 2007 to 2013

2004 prices

Item	2006[a)]	2007	2008	2009	2010	2011	2012	2013	Total
	in € billion								
1 Sustainable Growth	47.7	51.1	52.1	53.3	54.0	54.9	56.4	57.8	379.7
– *Competitiveness for Growth and Employment*	*7.9*	*8.3*	*8.9*	*9.5*	*10.2*	*11.0*	*11.8*	*12.6*	*72.1*
– *Cohesion for Growth and Employment*	*39.8*	*42.8*	*43.3*	*43.8*	*43.8*	*44.0*	*44.6*	*45.2*	*307.6*
2 Preservation and Management of Natural Resources	56.3	55.0	54.3	53.7	53.0	52.4	51.8	51.1	371.2
of which: Market Related Expenditure and Direct Payments	42.9	43.1	42.7	42.3	41.9	41.5	41.0	40.6	293.1
3 Citizenship. Freedom. Security and Justice	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	10.3
4 EU as a Global Player[b)]	8.3	6.3	6.6	6.8	7.1	7.4	7.7	8.1	50.0
5 Administration[c)]	6.7	6.7	6.9	7.1	7.2	7.3	7.5	7.7	50.3
6 Compensations	1.1	0.4	0.2	0.2					0.8
Total Appropriations for Committments	121.2	120.6	121.3	122.4	122.8	123.6	125.1	126.6	862.4
Total Appropriations for Payments	112.0	116.7	119.5	111.8	118.1	115.6	119.1	118.6	819.4
	as a percentage of GNI								
Committment Appropriations	1.09	1.10	1.08	1.06	1.04	1.03	1.02	1.00	1.04
Payment Appropriations	1.01	1.06	1.06	0.97	1.00	0.96	0.97	0.94	0.99
Margin Available	0.23	0.18	0.18	0.27	0.24	0.28	0.27	0.30	0.25
Own Resources Ceiling	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24

[a)] Expenditure for 2006 in accordance with the current 2000-06 financial perspective broken down for comparison in accordance with the new expenditure structure. – [b)] It is planned to integrate the European Development Fund into the EU budget in 2008. – [c)] Excluding the European Commission's administrative expenditure, which is covered by the first four expenditure items.

Source: Council of the European Union (2005).

the framework of a comprehensive reduction in subsidies, even if international competition is distorted by the subsidies of other countries. A more open approach to the world market would make it easier, not least for less developed countries, to gain market access for their agricultural products.

Structural policy

While agricultural expenditure is expected to decrease slightly in real terms up to 2013, the funds earmarked for general structural actions (to be known as "sustainable growth" in future) will increase significantly. Its share of the budget is to grow from 42.5 percent in 2007 to 45.5 percent in 2013. The funds planned for the subsection "competitiveness for growth and employment" (almost 7 percent of total EU expenditure in 2007; notably education and research promotion, and trans-European networks) are to be increased by an annual average rate of 7.5 percent to a share of 10 percent in 2013, a decision which has to be seen not least in connection with the Lisbon strategy. Expenditure in the subsection "cohesion for growth and employment" (formerly "structure and cohesion fund") is planned to increase on an annual average of 1 percent. Its share of total expenditure is to remain over the planning period at about 35.5 percent. The increase in the funds for structural policy is due mainly to the increasing integration of the ten new member states and the expected accession of Bulgaria and Romania during the planning period, which will mean an accentuation of the economic heterogeneity of the member states.

EU enlargement has meant a discernible decline in the average per capita GNI. Even so, if the existing assistance criteria – especially the regional per capita GNI of less than 75 percent of the EU average – are applied, few of the present development regions will have to forgo payments from the structural fund. Only a relatively small number will probably exceed the 75 percent threshold on statistical grounds alone. However, regions in Spain and eastern Germany, in particular, could be affected. Owing to EU enlargement, the total number of low income ("Objective 1") areas has risen significantly. Moreover, transitional regulations are planned which, on the one hand, restrict the level of subsidies to be paid to the recently acceded countries on the grounds that they presumably will have a limited absorption capability and which, on the other hand, ensure that those regions already enjoying assistance funds can expect to do so in future. Accordingly, subsidies to the "old" member states, which are to continue receiving half of the funds from the structural fund, will decline only slightly in real terms.

The aim of the European structural policy is to assist regions with below-average economic strength and thereby foster convergence within the EU. As in all statutory promotion measures, however, there is also the danger that undesirable incentives are created and that a transformation to a more efficient structure (with respect to the allocation of capital and labour) is thereby impeded. Sometimes, too, there appears to be insufficient consultation on the various European development objectives, and there is the danger of assisting some regions several times over. It therefore seems sensible to submit the EU's regional policy to a critical examination, too.

Conclusion

The debate on EU finances has essentially raised questions about the extent of centralisation, redistribution within the European Union and the tasks to be performed at the European level. The principle of subsidiarity enshrined in Article 5 of the EC Treaty argues – in cases of doubt – in favour of the fulfilment of tasks at national level and therefore advocates restricting the volume of the EU budget. The objective of strictly reviewing individual elements of government expenditure and, in particular, of consistently limiting subsidies in order, ultimately, to achieve a consolidation of public finances and a reduction in the persistently large contribution burden within the EU should also apply to the EU budget.

The planned curb on agricultural subsidies is a step in the right direction. However, further reforms in this area are appropriate. Making the agricultural sector more open to international competition would be a case in point. One measure that could lead to a general reduction in subsidies and further limit the extent of the EU budget could possibly be financed jointly by the member states in a regulated manner.

In structural policy, too, greater attention should be paid to a transparent and efficient use of resources. With regard to supporting the catching-up process in the economically weaker member states, a strengthening of investment spending is especially important. Nevertheless, in this area too, attention has to be paid to the risk of promoting ultimately uneconomic structures and of resources simply being rechannelled. It is also typically the case that it is very difficult to reduce subsidies once they have been installed. A stronger focus on assistance for member states with generally weaker economies might improve the targeting of resources since the other countries would no longer take the indirect course of financing via the EU budget.

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Russia's Flat Tax: Myths and Facts

Clifford Gaddy and

William G. Gale*

Five years ago, Russia replaced its old graduated personal income tax by one with a single flat rate of 13 percent. Following the reform, compliance improved, tax revenues shot up, and GDP grew dramatically. Is it then true, as often claimed, that Russia's example testifies to the economic power of the flat tax?[1] Our short answer is "no". In this note, we examine the limited research and information available on the effects of the Russian tax reform of 2001 and present five main conclusions:

1) The change in the personal income tax was not a stand-alone reform but only one element in a comprehensive set of fiscal reforms.
2) The personal income tax component of the reform package involved more than the introduction of a low, flat tax rate. Capital income loopholes were closed, and tax rates on most capital income were raised. Radical changes were made in tax administration and enforcement.
3) The increase in compliance that followed the 2001 reform is more likely attributable to changes in the administration and enforcement of tax laws than to lower rates.
4) The tax rate reductions had little if any effect on labor supply.
5) Economic growth had begun well before the reforms were introduced. GDP grew twice as fast before the income tax reform as it did after.[2]

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[1] In the United States, these claims are most frequently heard from supporters of the Hall-Rabushka (1995) flat tax. Some assert direct causality between the introduction of the Russian tax and the improvements in the economy (Mitchell 2003). Others simply link the two repeatedly, being careful never to explicitly assert causation (Rabushka 2002, for example).

[2] In the six quarters leading up to 1 January 2001, when the "flat tax" reform came into effect, Russia's GDP grew at an average annual rate of 10.6 percent. In the six quarters immediately following the introduction of the new tax, it grew at a 4.7 percent annual rate.

The Russian tax system in the 1990s[3]

To understand the relative importance of various aspects of the 2001 reforms, it is useful to step back and examine the pre-reform situation. The Russian tax system in the 1990s was stunningly primitive. Administration and enforcement were notoriously weak. The very legal basis for tax collection and auditing was severely limited. Taxpayer IDs did not exist. Tax rates were punitively high and took particularly damaging forms, such as turnover (gross receipt) taxes that hit even those firms that were losing money.

The results are predictable. Graft, corruption, evasion, and delinquency were rampant. When they did pay at all, large taxpayers typically negotiated payments independently of their actual obligations. A common practice was to offset tax obligations against goods or services delivered to the government. Only in some cases had those goods actually been ordered in government procurement orders. Frequently the cash-strapped enterprises offered the goods – mainly goods that were otherwise unmarketable – after they had been declared delinquent.

The problems of tax collection were broadly recognized. In early 1996 President Boris Yeltsin appointed a blue-ribbon commission to investigate the largest corporate taxpayers in the country (Karpov 1997). Presenting its report after an 18-month study, the panel found that during the period of review, these large enterprises paid less than 8 percent (!) of their tax bills in actual cash. They simply did not pay 29 percent of their obligations at all, while "paying" the remaining 63 percent in the form of offsets and barter goods. The market value of the goods delivered was far below the nominal price used in the offsets, leaving the government with substantially less in real revenues than officially accounted for.

The federal government was particularly victimized by these schemes. Enterprises frequently colluded with regional and local officials to hide income and hence keep revenues away from the federal government for taxes whose revenues were split between local and national authorities. In other cases, local governments demanded that enterprises pay their taxes in the form of goods and services that could only be used locally and not be shared with the federal government (for instance, by providing road

[3] See Gaddy and Ickes (2002) and Chua (2003) for more details.

construction or repairs of buildings). Often, if the federal government received anything at all in these schemes, it was only what the regional governments did not want.[4]

As a result of these practices, the Russian budget ran massive deficits. Even using the inflated prices used in the offset deals, federal revenues plummeted – from 16.2 percent of GDP in 1995 to 12.4 percent in 1998. To finance its deficits, the government had resorted to extensive borrowing outside and inside Russia at increasing and unsustainably high costs, thus digging itself even deeper in debt. Finally, on 17 August 1998, the government defaulted on about $40 billion worth of its own ruble-denominated debt instruments (so-called GKOs), around $17 billion of which were held by foreigners.

Following the debt crisis, and a brief period of near-paralysis of the economy, Yeltsin addressed the fiscal situation with new determination. Over the next year, he tapped three successive representatives of the police and security agencies to serve as prime minister. The last of these was Vladimir Putin, then head of the Federal Security Service, successor to the KGB. In December 1999 Yeltsin announced his own retirement, to take effect on 1 January 2000, and he appointed Putin as acting president.

Under Putin the Russian government showed even greater resolve to deal with tax enforcement issues. In his first presidential state of the union message, Putin declared that compliance with the new tax law, then about to be adopted by the parliament, was a civic duty of all Russians (Putin 2000). He accompanied his moral exhortations with a high-profile public relations campaign to raise the profile, prestige, and power of tax enforcement agencies. A typical measure was his decree in early 2000, designating March 18 as a new "professional holiday": the Day of the Tax Police. At the same time, the tax police began asserting themselves with respect to both corporate and individual taxpayers. Oil companies were threatened with denial of access to export pipelines if they failed to pay taxes. In June 2000, six months before the 2001 reforms took effect, the tax police began assembling detailed personal data on taxpayers in the city of Moscow. Senior tax officials stated that the campaign was part of "an effort to clamp down on the widespread practice in Moscow of wealthy individuals sheltering income" (Jack 2000).

The 2001 reforms[5]

The new tax law enacted in July 2000 and brought into force at the beginning of 2001 changed both the structure and administration of taxes. The personal income tax (PIT), which had been a graduated tax with marginal rates of 12, 20 and 30 percent, was replaced by one with a flat rate of 13 percent. The reforms also widened the tax base by eliminating many deductions and exemptions. Prior to the reform, the average tax rate was 14 percent, so the net change in average tax rates was small.

Capital income was taxed at higher rates, though, and these rates generally *increased* in 2001. The tax rate on dividends was raised from 15 percent to 30 percent. The corporate tax rate remained at 30 percent, but municipalities were allowed to, and did, impose an additional 5 percent tax. Other forms of personal income, such as gambling, lotteries, insurance, below-market-rate loans, and excessive bank interest payments, faced tax rates of 35 percent, in an effort to shut down some particularly creative avoidance schemes.[6]

Despite the flat rate, these reforms do not add up to a Hall-Rabushka (HR) flat tax. The HR flat tax is a two-part value-added tax, in which all nonwage value added is taxed at the firm level, while wages, less personal exemptions, are taxed at the individual level. But Russia not only had the PIT, it also had a separate VAT and a separate corporate income tax. Moreover, the 2001 changes increased the taxation of capital income at the individual level, rather than setting it to zero, as under the HR tax.

[4] In one notorious case, the oblast (province) government of Samara had permitted enterprises to pay their regional taxes in the form of goods. One of the items offered turned out to be ten tons of toxic chemicals from a local chemical plant. Although the plant claimed (and was given) credit for 400 million rubles [$80,000] in taxes, auditors later determined that the chemicals were worthless (and indeed dangerous). The Samara government never suffered from this curious deal, however, since it had previously sought and received permission from the federal ministry of labor to fulfill its obligations to the federal unemployment compensation fund by delivering goods instead of money. Among the goods it offered were ... the ten tons of toxic chemicals. (Gaddy and Ickes 2002, 176).

[5] See Ivanovo et al. (2005) for details.

[6] These avoidance schemes are interesting in their own right and suggest what might occur in a system where only wages were taxed. Take, for instance, the insurance scheme. As explained to us by one Russian tax expert, a not atypical arrangement would have a firm buying an "insurance policy" that was virtually certain not to pay off, and its workers buying a different policy from the same "insurance company" – usually an entity created by the firm solely for the purpose of executing this scheme – that was almost certain to pay off. In such a transaction, the firm effectively transfers resources to the workers, just like a wage payment. Meanwhile, the firm receives a deduction for the insurance purchase (as it does for wages), while the insurance payment would not be taxed under a wage tax.

Other taxes were altered as well. Deductions and exemptions in the VAT were reduced. The tax rate on cigarettes and gasoline increased. Some taxes were reduced significantly. Before the reform, social insurance taxes were a flat 39.5 percent (combined employer and employee rates, measured on a tax-exclusive basis). After the reform, these were changed to a sharply regressive structure, with rates starting at 35.6 percent and falling to 5 percent. Also, one tax on business turnover (gross receipts) was eliminated, and another reduced (and then repealed in 2003).

Probably even more important than changes to the structure of taxation were the enforcement and administrative changes that continued the efforts noted in the pre-2001 period. First, the law provided for the introduction of a common taxpayer ID number. Second, the law allowed tax authorities to assess tax liabilities indirectly – for example, when they could not secure entry to a taxpayer's premises. Third, the law authorized tax audits when sufficient evidence of a tax or nontax crime was available.

Other administrative changes would help collect PIT revenues in particular. Taxes on all income paid to private individuals – including taxes on interest payments and dividends – were to be withheld at source.[7] Also, the revenue sharing rules were changed. By giving regional governments nearly 100 percent of PIT revenues instead of the previous 80 percent, the law removed the incentive of subnational governments to help local taxpayers hide income from national authorities.

The four different social insurance taxes whose combined rates were reduced also had their bases conformed to each other and to the measure of wages in the income tax. This likely simplified compliance and made enforcement easier.

Finally, a discussion of enforcement would not be complete without reference to the increased atmosphere of tighter control and even coercion that characterized the Putin regime from the beginning. One newspaper account told of a decision by Putin's newly appointed presidential representative in southern Russia to assign new "commissars" to sit on the boards of important local enterprises. Their task, said the Putin man, would be "to defend the interests of the state [by] pushing the enterprises to make full and accurate payment of all their obligations to the budget, above all, their taxes" (Kolbasin 2001).

In summary, to describe the 2001 reforms by saying that "Russia instituted a flat tax" grossly distorts and oversimplifies what happened. The tax rate on capital income was not zero, and in fact was higher than the 13 percent rate in the PIT. Many deductions, exemptions, and loopholes were closed. Social insurance taxes and turnover taxes, the latter a particularly damaging levy from an economic perspective, were cut dramatically. Other taxes were changed. A major effort at improved tax administration and enforcement occurred at the same time.

Revenue trends[8]

After the reforms were introduced, PIT revenue rose by just over 20 percent as a share of GDP, from 2.4 percent of GDP in 2000 to 2.9 percent in 2001.[9] While flat tax proponents are quick to attribute this change to the tax rate structure, caution is warranted for several reasons. First, personal income, as measured by the national income accounts, rose by 10 percent relative to GDP during the year. Second, the enforcement and administration measures detailed above likely reduced avoidance and evasion by substantial amounts. Third, restrictions on deductions and exclusions – broadening of the base – undoubtedly helped as well. These factors alone could explain the entire revenue change. This view is supported by the fact that revenues from a variety of other taxes also rose. Relative to GDP, revenue from the VAT rose by 14 percent (from 6.3 percent of GDP in 2000 to 7.2 percent in 2001), resource taxes rose by almost 30 percent (from 1.1 percent of GDP in 2000 to 1.4 percent in 2001), taxes on trade rose by almost 20 percent, from 3.1 percent of GDP to 3.7 percent), excise taxes rose by about 15 percent (from 2.3 percent of GDP to 2.7 percent).

By 2004, however, the PIT had grown to 3.4 percent of GDP, a more than 40 percent increase over its 2.4 percent share in 2000. Other than resource taxes, which tripled as a share of GDP from 2000 to 2004, the other taxes did not grow as significantly over the

[7] Withholding at source and using taxpayer ID numbers would be expected to improve compliance significantly. For example, in the United States, forms of income that are withheld at source and reported by third parties have enforcement rates of about 99 percent. Forms of income that are reported by third parties but not withheld at source have compliance rates above 90 percent. Forms of income that are neither reported by third parties nor withheld have compliance rates around 70 percent or less. See Gale and Holtzblatt (2002).

[8] The data in this section are taken from Ivanova et al. (2005).

[9] Real GDP itself grew at 5.1 percent in 2001, so real revenue growth in the PIT was quite remarkable — 25.8 percent.

2001 to 2004 period. Thus, a fuller explanation of revenue trends is warranted.

The macroeconomic situation

Interpretation of revenue trends is likely to depend in part on macroeconomic considerations, and two issues in particular apparently can explain much of the trends noted above.

First, beginning in February 1999, the world price of Russia's most important export commodity, oil, began a rise that would lead to its quadrupling within 19 months. Revenues from crude oil exports soared from barely $2 billion in the first quarter of 1999 to nearly $7 billion in the third quarter of 2000, to over $20 billion by the second quarter of 2005. Kwon (2003) estimates that 80 percent of the total post-1998-crisis gains (of about 5 percentage points of GDP) in the revenue of the general government came from the oil sector, with the high oil prices accounting for most of the gains. Tax reform, Kwon argues, played a secondary role and did so largely by making the tax regime more elastic to oil prices. He also shows that Russia's revenue performance in the post-crisis period did not differ from other oil-exporting countries – even without a tax reform.

Second, wages grew rapidly after the debt crisis. Ivanova et al. (2005, 19) point out that after-tax real wage income grew by more than 18 percent in 2001, while gross real wages grew at about 12 percent. Both outpaced GDP growth, which was about 5 percent. This procyclical pattern for labor is unusual compared to other countries, but not compared to earlier episodes in Russia, where real wages tend to overshoot GDP growth. Ivanova et al. conclude that "wage developments thus appear to be a large part of any explanation of the performance of PIT ... revenues."

Microevidence on labor supply

Even more compelling evidence on the effects of the tax rate changes can be obtained from microeconomic data. A study by the IMF (Ivanova et al. 2005) uses panel data for the years 2000 and 2001.[10] Employing a difference-in-differences approach,[11] the IMF authors note that the 2001 changes raised the marginal tax rate by 1 percentage point for people who were in the 12 percent bracket before reform but reduced marginal rates by 7 and 17 percentage point for those in the 20 and 30 percent brackets. If lower tax rates encourage labor supply (or other economic behavior), one should see – other things equal – an increase in labor supply for people who were originally in the 20 and 30 percent bracket and a decrease for those in the 12 percent bracket. Of course, other things may have been changing, so to account for changes over time, the authors emphasize that the increase in labor supply should be larger for those originally in the top two brackets than for those in the lowest bracket.[12]

Their results are quite straightforward: Labor supply did not change differentially across the groups. To put it differently, there was no increase in labor supply in 2001 among households that faced high tax rates in 2000, *relative to* households that faced the 12 percent rate in 2000. The results are inconsistent with the notion that the cut in tax rates raised labor supply, and thus undermine any claim that the flattening of tax rates in the PIT led to a big increase – or even any increase – in economic activity in Russia.

Microevidence on compliance

The same IMF study (Ivanova et al. 2005) does find significant evidence of an improvement in compliance. The estimated compliance rate – based on comparisons of reported income and consumption – for those originally in the 12 percent bracket was essentially constant, at 74 percent in both years. The estimated compliance rate for those in the top two brackets in 2000 rose, from 52 percent in 2000 to 68 percent in 2001.

It is possible that this change was due to the reduction in tax rates. It is also possible that the broadening of the tax base to tighten up on capital income and the avoidance schemes noted above (for example, insurance payments) could have had a significant influence as well in the higher income group relative to the lower income group. Finally, it seems likely that the efforts to crack down on evasion and

[10] The data are from the Russian Longitudinal Monitoring Survey, a household survey that provides data on income and other characteristics of about 3,500 adults for most years between 1994 and 2002.

[11] Their approach is similar to that taken by Feldstein (1995), Eissa (1995), and others.

[12] The authors also point out that including the changes in social insurance tax rates implies net marginal tax rate reductions for both groups, but the difference in tax rate changes between the two groups expands because social insurance rates were cut (much) more for high-income than low-income households. Thus, including social insurance tax rates makes the test even stronger.

to increase auditing and indirect assessment would have had differential effects by income group. As a result, it is hard to pin down why compliance rose for higher-income groups.

It is interesting to note, however, that any notion of a Laffer curve effect should be abandoned, for two reasons. First, revenues collected from taxpayers in the top two marginal tax rate groups in 2000 fell dramatically relative to revenue collected from the lowest tax group. This is true both for the PIT and for the sum of PIT and social insurance taxes. Second, Chua (2003) estimates that in the absence of macroeconomic effects and enforcement changes, revenues from the PIT would have fallen by 0.2 percent of GDP in 2001, or by about 10 percent.

Conclusion

There is no doubt that Russia has radically improved the operation and structure of its tax system in the past decade and that Russia has experienced strong economic and revenue growth since the debt crisis in 1998. Understanding the links between these two sets of events is complicated by many factors, including the complexity and wide range of tax changes introduced and the enormous number of factors that influence economic growth. While it seems clear that simple statements like "the flat tax caused significant growth in the economy and revenues" are not supported by the evidence, it is also undeniable that much additional work remains to sort out the various causes and effects of policies in the Russian transition.

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Is Government Health-care Spending Sustainable?

The traditional focus of economic analyses of health-care systems on efficiency and equity has recently been expanded to include the question of whether government spending on health – as part of a country's total health-related expenditures – is sustainable in the long-run. While sustainability questions usually are addressed with respect to total public spending (e.g., also in the contribution of Afonso 2006 in this issue of DICE Report), it is now specifically asked whether an important part of government spending – that on health care – is sustainable. This question seems to have come to the fore not least in connection with the recent far-reaching decision of the present administration in the US, namely to expand the free-of-charge provision of drugs within Medicare insurance for the elderly. This article is based on a recent paper by Laurence Kotlikoff and Christian Hagist about "Who's going broke? Comparing Growth in Health-care Costs in Ten OECD Countries" (2005). Kotlikoff and Hagist's analysis, as well as the present article, concentrates on *government* spending on health.

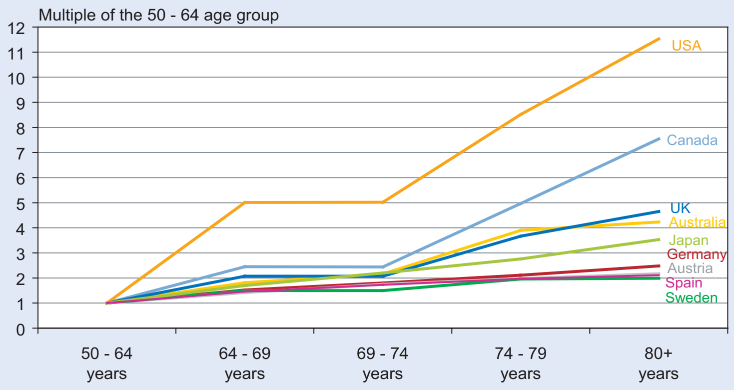
In a *first step* the authors try to disentangle the total growth of government spending on health from its components, namely spending caused by demographic developments (ageing and population growth) and by raising the benefit level. The latter is measured by that part of government health expenditures that specifically benefit the (reference) age group of 50–64 years. Figure 1, where the health costs for the reference group is normalized to 1, shows how much more is spent on older groups. The largest – in fact an enormous – difference in spending on older persons and on the reference group occurs in the US and in Canada. But the other countries also spend between twice and four times as much on older groups than on the reference group. Specifically for the US, this might be caused by delayed demands for health-care services that become free-of-charge when patients are eligible for Medicare (up to now, however, without free drugs).

The age-related burden of health-care costs plus the projected nearly doubling of the share of the elderly in the population of rich countries up to 2050 (see the 2005 United Nations population study in which the US, however, fares significantly better than most other rich countries) makes it highly relevant to ask about the demographic (and, thus, unavoidable) part of the past and future increase of government health-care spending. Table 1 provides information on the past. On average for the 10 countries included in the study, total government spending on health (col. 2) grew more than twice as quickly as per capita GDP (col. 1) did (4.89 compared to 2.14) – while the difference was even three times as much in Australia and the US. By contrast, Sweden managed to keep the growth of total government spending on health relatively close to GDP growth.

How important is the benefit level component in explaining the overall rise of government spending on health? Col. 4 shows that the rise of the benefit level explains the lion's share of the rise in total government spending on health. Subtracting benefit level growth from overall spending growth, we arrive at col. 5, which represents the share of demographic factors in the overall rise of government health spending. With the sole exception of Australia, the contribution of demographic factors to the growth of government health spending is smaller than GDP growth.

Figure 1

Age Profile of Public Health-care Benefits per Head, 2002



Note: Example: In the USA public health-care spending per head for the age group 80+ years was 11.5 times higher than for the reference group (50 - 64 years).
Source: Kotlikoff and Hagist (2005).

The information in Table 1 also makes it possible to calculate the elasticity of demand for government-provided health care in relation to income (col. 6, and Figure 2). Most figures are well above 1;

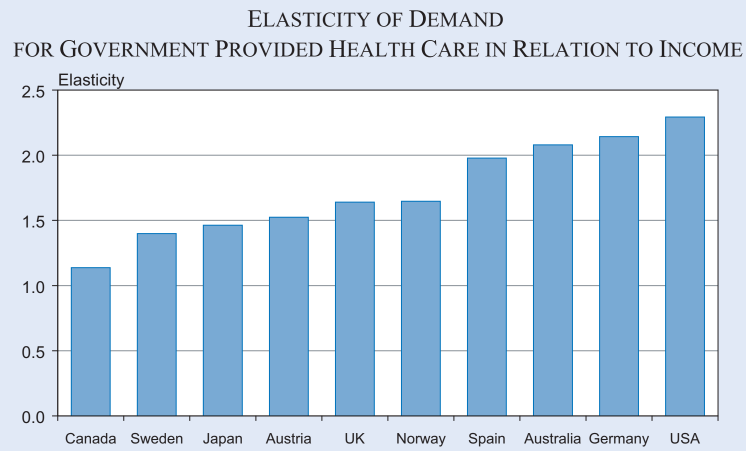
Table 1

GDP and government health spending, 1970 – 2002

	Compound annual growth rates, in %					
	Per capita GDP	Total government spending on health	Per capita government spending on health	Government health spending on age group 50 – 64 (benefit level)	Total government spending on health – were there no increase in benefit levels	Income elasticity (benefit level growth / per capita GDP growth)
	(1)	(2)	(3)	(4)	(5) = (2) – (4)	(6) = (4) / (1)
Australia	1.76	5.61	4.13	3.66	1.95	2.08
Austria	2.44	4.23	3.99	3.72	0.51	1.52
Canada	2.04	4.28	3.08	2.32	1.96	1.14
Germany	1.54	4.62	3.62	3.30	1.32	2.14
Japan	2.44	5.50	4.85	3.57	1.93	1.46
Norway	3.06	5.82	5.30	5.04	0.78	1.65
Spain	2.34	5.79	5.08	4.63	1.16	1.98
Sweden	1.68	2.92	2.59	2.35	0.57	1.40
UK	2.11	3.91	3.71	3.46	0.45	1.64
USA	2.01	6.23	5.10	4.61	1.62	2.29
Average	**2.14**	**4.89**	**4.14**	**3.67**	**1.22**	**1.71**

Source: Kotlikoff and Hagist (2005).

Figure 2



Source: Kotlikoff and Hagist (2005) and Table1, col. 6.

Table 2

The future of government health-care spending

	Government health care spending in % of GDP	Present value of future government spending on health care in % of present value of future GDP; discount rate: 5% if historic growth rates of benefit levels …		
	2002	… had stopped after 2002	… continued for 20 years	… continued for 40 years
Australia	6.36	7.75	9.63	11.59
Austria	5.38	6.38	7.39	8.34
Canada	6.73	9.54	9.88	10.18
Germany	8.56	9.74	11.67	13.32
Japan	6.67	8.86	10.12	11.24
Norway	8.01	9.25	11.69	14.50
Spain	5.45	6.40	8.28	10.26
Sweden	7.88	8.67	9.35	9.90
UK	6.44	7.48	8.74	9.93
USA	6.57	8.38	11.35	14.98

Source: Kotlikoff and Hagist (2005).

in the case of Australia, Germany and the US they are even above 2. That does not simply confirm that health care is a "luxury good"; rather it establishes that government-provided health care reacts generously to rising levels of income and demand for health care.

In a *second step*, the authors ask about the sustainability of past spending trends. The starting point is government health-care spending as a percentage of GDP in 2002 (Table 2). Then they calculate the present value of future government health-care spending in relation to the present value of future GDP. They do this for three different discount rates (3 percent, 5 percent and 7 percent) and for four cases, namely, (1) the historic growth rates of benefit levels stop immediately after 2002, (2) they continue for an additional 20 years, (3) for an additional 40 years and (4) for an additional 60 years. Of the 12 different cases, only 3 (at a discount rate of 5 percent) are presented in Table 2. Even if the growth of benefit levels is immediately stopped, the present value of government health-care spending in relation to GDP is considerably larger than the value for 2002. If, however, benefit level trends continue for another 20 or even for another 40 years, the figures for most countries are much higher than those in 2002.

A figure of 10 percent or even 15 percent of GDP for total (i.e., government and private) spending on health may be bearable for citizens and even wanted by them, but the same figure for government spending only is plausibly much more than could be sustainable in the long-run. An aggravating point is the effect of such benefit trends on intergenerational equity or conflicts. With respect to the US and the recent (above mentioned) Medicare legislation the authors conclude: "There is, of course, a limit to how much a government can extract from the young to accommodate the old. When that limit is reached, governments go broke. Of the ten countries considered here, the U.S. appears the most likely to hit this limit" (p. 17). Unfortunately, the prospects are not much better for a range of other countries, too, such as for Norway, Germany, Japan and Australia.

R. O.

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Social Expenditure in OECD Countries

Most social support in OECD countries is publicly provided. In 2001, the share of public social spending in total social spending was nearly 90 percent. Public social spending accounted for 20.5 percent of GDP, on average, for all OECD countries. In most OECD countries, public support for those in retirement and health expenditure makes up over half of all budgetary allocations with a social purpose. With more than 11 percent of GDP being spent on old-age cash benefits and survivor payments, Belgium, Germany, France, Austria and in particular Italy can be regarded as "pensioner states" (Figure 1).

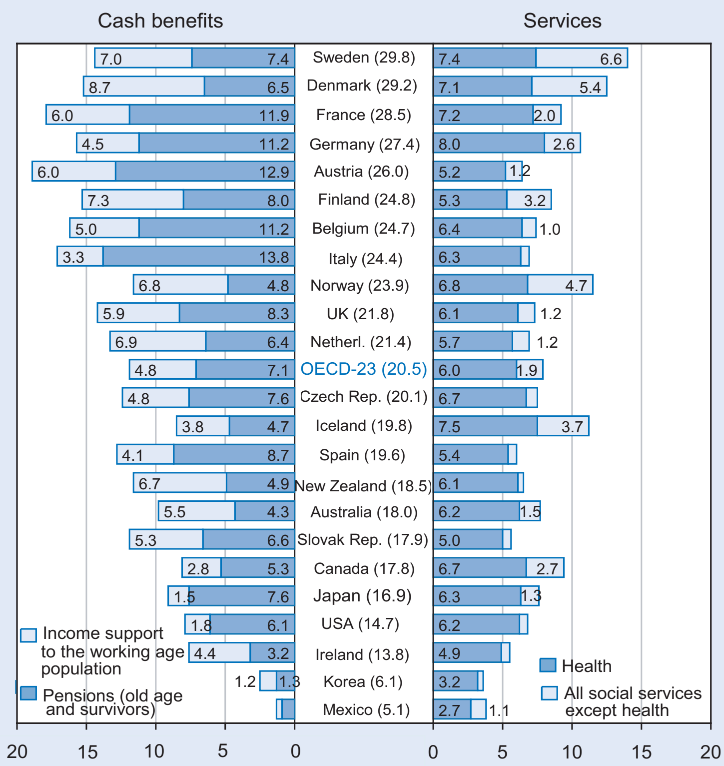
Public income support to the working age population during sickness, incapacity, unemployment, etc., is highest in the Scandinavian countries, the Netherlands and New Zealand. On the other hand, Canada, the United States, Japan, Korea and Mexico only spend a small part of their GDP on income support to the working age population. Service support (childcare etc.) is provided to a large extent in the five Nordic countries. They spend between 3.2 percent and 6.6 percent of GDP on all social services except health. These countries seem to have a more balanced approach towards providing social support to senior citizens, the working age population and to families with children.

Pension benefits constitute a major component of voluntary private social benefits everywhere, but are most important in countries where the level of public pension benefits is comparatively low (compare Figures 1 and 2). Therefore, it is not surprising that private pension benefits are most important in Australia, Canada, the Netherlands, Japan, the UK and the US and range from 3.3 to 3.8 percent of GDP. These figures do not, however, fully reflect the importance of private pension programmes. Except for Japan,[1] they refer to the benefits paid under funded or capitalised programmes, but many of these programmes have not yet fully matured. As current contributions exceed the magnitude of current benefits significantly in most countries, the importance of these private pension plans is expected to grow in the future with the maturing of pension plans.

In the absence of a public health insurance system with universal coverage for workers, private health spending is most important in the US: employer-provided health benefits to their workers, dependents and retirees were estimated to be around USD 480 billion in 2001 or 5 percent of GDP (these expenditures do not include payments by individuals for health services). In 2001, health

Figure 1

PUBLIC SOCIAL EXPENDITURE BY BROAD SOCIAL POLICY AREA[a)], 2001
in percentage of GDP



a) For some countries there is an issue with items recorded as spending on services for elderly and/or the disabled provided by institutions other than hospitals also being included under public expenditure on health.

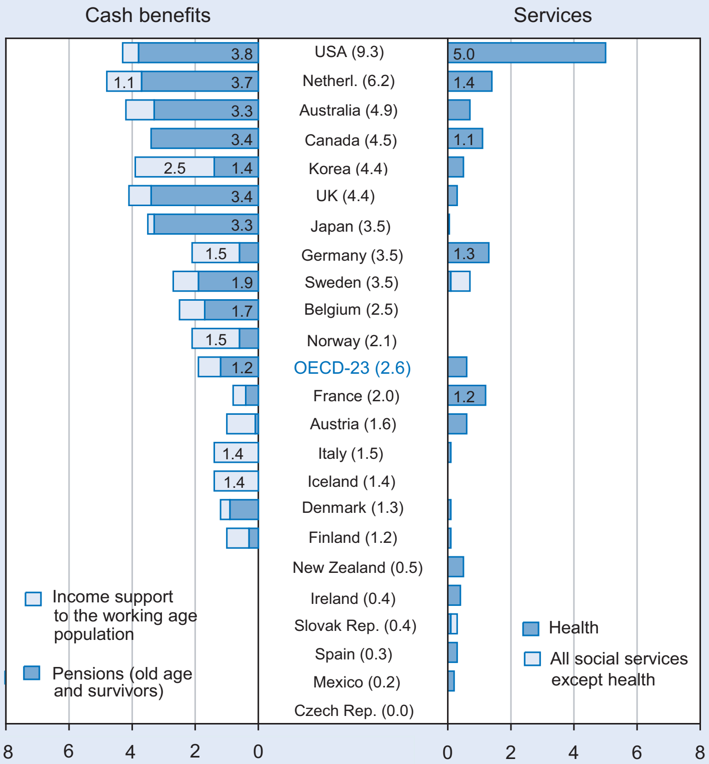
Note: A cash/services disaggregation is not available for spending on Active Labour Market Programs (ALMPs). ALMPs are, however, included in total public spending in brackets.

Source: OECD Social Expenditure database.

[1] Spending recorded for Japan largely involves retirement allowances paid by employers to retiring employees rather than benefits from capitalised private funds.

Figure 2

PRIVATE SOCIAL EXPENDITURE
BY BROAD SOCIAL POLICY AREA[a)], 2001
in percentage of GDP



a) For some countries there is an issue with items recorded as spending on services for elderly and/or the disabled provided by institutions other than hospitals also being included under public expenditure on health.

Note: A cash/services disaggregation is not available for spending on Active Labour Market Programs (ALMPs). ALMPs are, however, included in total public spending in brackets.

Source: OECD Social Expenditure database.

expenditure (private and public) was highest in the US, Germany and France. The relatively high health expenditure in the US has led to total social spending in the US being close to the OECD average (Figure 2).

Private social cash transfers to the working age population include mandatory employer-provided incapacity-related cash transfers – sickness, disability and occupational injury benefits – as recorded for Australia, Austria, Denmark, Finland, Germany, Iceland, Korea, The Netherlands, Norway, Slovak Republic, Sweden, the UK and the US (in some states). Other examples of private social benefits include: supplementary unemployment compensation in the US, employer-provided childcare support in the Netherlands and employer payments during parental leave periods in many countries. Privately financed service support is negligible in almost all countries.

W. O.

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Population Ageing and Pension Reform

Population ageing is a world-wide phenomenon. Ageing patterns in terms of absolute levels as well as rates of change differ substantially across country groups, however.

While old-age dependency ratios are and will be the highest in the (rich) G10 countries (23 percent and 42 percent respectively), the increase in the ratio (1.8) in these countries until 2050 will be relatively moderate (Table 1). In contrast, China, Latin America and India will exhibit much larger increases in their old-age dependency ratios. It is only Africa that has and will continue to have relatively low old-age dependency ratios.

Within the group of G10 countries, there are also large differences (not shown in Table 1). In 2005, the old-age dependency ratios, with an average of 23 percent (Table 1), range from about 18 percent (US) to 30 percent (Japan and Italy). This range is set to widen considerably and will spread from 34 percent (US) to about 70 percent (Italy and Japan), averaging 42 percent in 2050 (Table 1).

Table 1

Old-age dependency ratios and their change for groups of countries 2005 and 2050

(age group 65 + years in percent of age group 15–64 years)

	2005	2050	2050 in relation to 2005
World	11	25	2.3
G10	23	42	1.8
China	11	37	3.4
Latin America	9	29	3.2
India	8	22	2.8
Africa	6	10	1.7

Source: United Nations (2005).

Without any (further) reforms of the pension systems (mainly with regard to benefit levels, contribution rates and retirement age) and without changes in gender participation rates, immigration and productivity trends, public spending on pensions in rich countries will probably increase considerably. A recent article in Financial Market Trends (OECD 2005) has collected related forecasts for a number of OECD countries (Table 2).

Table 2

Public spending on old-age pensions, 2000 and 2050

in percent of GDP

	2000	2050	change in %
France	12.1	14.5	19.8
Italy	14.2	14.4	1.5
Germany	11.8	13.8	17.0
Belgium	9.0	13.0	44.4
Sweden	9.2	10.8	17.4
Switzerland	7.2	10.8	50.0
Japan	7.9	8.5	7.6
Netherlands	5.2	8.3	59.6
Canada	4.7	6.4	36.2
USA	4.4	6.2	40.9
UK	5.0	5.6	12.0

Source: OECD (2005).

The list of countries was arranged according to the probable level of public spending in 2050. France, Italy and Germany rank highest and would have to spend around 14 percent of GDP on their pensioners, while the figures for Canada, US and UK are much less dramatic. However, the relative increase in public spending on old-age pensions is more pronounced in the countries at the lower than in those at the upper end of the list.

In recent years, governments have reacted to the challenge posed by ageing and have initiated major reforms of their pension systems (Table 3). Not shown in Table 3 are the many systemic changes with regard to statutory retirement age, access to early retirement and methods of benefit indexation.

Simulation models show that the reforms conducted up to now will not be sufficient. However, a further increase of the already high contribution rates in some countries will have adverse effects on the labour market. Thus, a further reduction in the replacement level is a major way out. In order to avoid serious repercussions with respect to the standard of living of pensioners, private retirement saving must be increased. As Table 4 shows, assets of private pension funds have already increased remarkably – albeit only in some countries.

While assets of private pension funds, as a percentage of GDP, are low and stagnating in some countries (Germany, Italy and Sweden), they are much higher and have developed dynamically in other countries (UK, Canada, the Netherlands, Switzerland, US).

R. O.

Table 3

Recent pension reforms

	Date of last major reform	Changed level of benefits	Changed level of contribution rates	Present level of replacement rate	Present level of contribution rate
Belgium	1997	reduction	–	41	16.4
Canada	1997	no	increase	43	9.9
France	2003	reduction	increase	53	16.5
Germany	2001	reduction	increase	46	19.5
Italy	2004	defined benefits: abolished	no	79	32.7
Japan	2004	reduction	increase	50	18.3
Netherlands	2004	reduction	increase	68	28.1
Sweden	1998	defined benefits: abolished	no	65	18.9
Switzerland	2003	reduction	no	58	23.8

Source: OECD (2005).

Table 4

Assets of private pension funds, 1990 and 2001

in percent of GDP

	1990	2001	Change in percentage points
Germany	3	3	0
Italy	3	4	1
Sweden	2	4	2
Belgium	2	6	4
Japan	12	19	7
Canada	29	48	19
US	42	63	21
UK	50	66	16
Netherlands	72	105	33
Switzerland	56	114	58

Source: OECD (2005).

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Eastern Enlargement and Transitional Migration Regulations

The EU accession treaties with the eight Central and Eastern European New Member States (NMS) contain transitional arrangements for free labour mobility that make it possible to postpone the opening of labour markets up to a maximum period of seven years. These transitional provisions can only be adopted sequentially. Individual countries have the freedom to decide whether or not to adopt transitional arrangements. Delegating the decision on transitional periods to the national level had important consequences: Austria, Germany, Belgium, Finland, Greece and Luxembourg declared from the beginning that they planned to retain relatively tight restrictions to the immigration of labour. The governments of another five countries – Denmark, Ireland, the Netherlands, Sweden and the UK – stated instead that they did not plan to restrict the access to their labour market at that time, while the remaining countries (Italy, Portugal and Spain) remained undecided.

The governments in four out of the five countries that had formally stated their intention to open up their labour market reneged on this commitment and adopted transitional restrictions vis-à-vis workers from the NMS. In particular, in Denmark, the government agreed with the opposition to concede a work permit only to those individuals from the NMS who can prove that they have a job that meets regular standards with regard to wage and working conditions. If migrants lose their job, residence permits are withdrawn. The Netherlands reversed the decision of the Kok II government to open up the labour market completely and introduced instead a quota of 22,000 employees until May 2006. If the quota is not filled, the removal of the transitional arrangements can be considered. Welfare access was also closed to migrants. The UK and Ireland decided to open up their labour markets in principle to individuals from the NMS, but they also left certain restrictions in place. Work permits are only issued for one year, and if migrants lose their jobs, the resident permits can be withdrawn. Again, the access to welfare benefits remains restrict-

Transitional regulation in the EU-15

	Access to labour market	Access to welfare benefits
Austria	Access to labour markets restricted at least for 2 years, quotas for work permits.	Restricted.
Belgium	Access to labour markets restricted at least for 2 years.	Restricted.
Denmark	General access to labour market, but obligations for work and residence permits. Work permits issued only for 1 year (EU-nationals: 5 years).	Restricted, residence and work permits can be withdrawn in case of unemployment.
Finland	Access to labour markets restricted at least for 2 years.	n.a.
France	Access to labour markets restricted at least for 2 years.	Restricted.
Germany	Access to labour markets restricted at least for 2 years, prolongation for further 3 years under discussion.	Restricted.
Greece	Access to labour markets restricted at least for 2 years.	n.a.
Ireland	General access to labour market, but obligation to register for work and residence permits. Work permits issued first for limited time. Safeguard clause applies.	Restricted, income support etc. is granted only to individuals who have a right for a residence permit.
Italy	Access to labour markets restricted at least for 2 years, quotas for work permits.	Restricted.
Luxembourg	Access to labour markets restricted at least for 2 years.	Restricted.
Netherlands	Access to labour markets restricted at least for 2 years, quotas for work permits.	Restricted.
Portugal	Access to labour markets restricted at least for 2 years, quotas for work permits.	Restricted.
Spain	Access to labour markets restricted at least for 2 years, bilateral agreement with Poland which permits limited number of Polish nationals to work.	Restricted.
Sweden	Community rule for free labour mobility applies.	Equal treatment.
UK	General access to labour market, but obligation to register for work and residence permits. Work permits issued first for limited time. Safeguard clause applies.	Restricted, income support etc. is granted only to individuals who have a right for a residence permit.

Source: Boeri and Brückner (2005).

ed. Sweden is currently the only country where Community rules for labour mobility apply at present.

Finally, the three "undecided" countries opted for restrictive provisions. Italy, in particular introduced a quota of 20,000 work permits for workers from the NMS, while Spain and Portugal decided to leave their immigration restrictions in place at least for the first two-year period.

Altogether, what can be observed is a "race to the top" in immigration restrictions vis-à-vis workers from the NMS. This race ended with four different transitional regimes: first, a restrictive immigration regime, which gives nationals from the NMS no further rights than citizens from non-European Economic Area countries. This implies that work permits are only issued in exceptional circumstances when it can be proved that neither natives nor other EU-nationals can fill the position. The main channel of entry in these countries is family reunification. This regime applies to Belgium, Finland, Germany, Greece, France, Luxembourg and Spain. The second regime adopts basically the same rules as the first one, but it opens the labour market beyond that by a quota for nationals from the NMS (Austria, Italy, Netherlands and Portugal). Third, we have a number of countries that generally admit the access of nationals from the NMS to their labour markets, but work and residence permits are only issued if certain requirements with regard to tariff wages, working conditions etc. are met. Moreover, the access to welfare benefits is limited and residence permits can be withdrawn in case of unemployment (Denmark, Ireland, UK). Finally, we have one country, Sweden, where the rules of the Community for the free movement of labour apply.

W. O.

Reference

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Trends in Development Aid (3): Organisational Structures

Two previous articles on the subject (DICE Report 3/2005 and 4/2005) have looked at regional and sectoral trends of development assistance as well as the problems of tied aid, debt relief and donor coordination. The focus of this (concluding) article is on the organisational and administrative structures of the donor countries.

Organizational structures of the administration of development assistance differ widely and in many dimensions across donor countries. A recent study of the Development Assistance Committee (DAC) of the OECD on "Managing Aid" (2005) has compiled comparative information on many important aspects of the organizational set-up of providing development aid. The Table in this article has been arranged mainly on the basis of this DAC study.

The overall aim of national development efforts (column 1 in the Table) is remarkably similar across donor countries: poverty reduction, economic and social progress, and peace are mentioned in nearly all country statements. In some statements reference is also made to solidarity, cultural cooperation and protection of the global environment. Interestingly, it is only Japan that has overtly formulated an egoistic reason for development aid: to "help ensure Japan's own security and prosperity".

Less than two thirds of the 18 countries included in this article have passed legislation (column 2) that establishes the basis for and defines the main objectives of their development cooperation efforts. However, several donor countries like Germany have compensated the absence of legislation by formulating an official development policy statement such as the German "Programme of Action 2015 for Poverty Reduction", which contains specific guiding principles and guidelines for German development cooperation, specifically with regard to the UN "Millennium Development Goals" (see DICE Report 3/2005). Such a legal or policy basis may be of critical importance if an orientation towards development aid is to be regarded as a core component of general government policy.

Competencies for the strategic orientation of development cooperation of a country are allocated to quite a range of different ministries (column 3). Only two countries in our sample, Austria and Denmark, have assigned exclusive leadership to one ministry only, the Ministry of Foreign Affairs, which is responsible for almost all aspects of their countries' aid programmes. All other countries have distributed key aspects of foreign assistance across several ministries. The ministries involved are mostly those of foreign affairs, cooperation, finance, economic affairs and foreign trade. In the majority of countries it is the Ministry of Foreign Affairs which is responsible. In only a minority of countries, to which also Germany belongs, is the leading role reserved for the Ministry for Cooperation.

Donors also differ quite drastically with regard to the diversity and density of their implementing agencies (column 4). Countries with a comparatively high institutional density include Germany and Portugal. The advantage of such a highly diversified structure is usually a wide variety of aid instruments at the donor country's disposal, ranging from issuing loans to sending volunteers, to mention only two. However, such structures can place serious challenges on an effective donor coordination, both with regard to other donors and to recipient countries, especially as the diversified structures of each donor follow very different patterns.

Efforts to improve coordination and policy alignment between the different development players within a country's specific institutional set-up have increased in most donor countries over the past years, and half of the donors analyzed have a formalised, inter-ministerial coordination structure (column 5). Such mechanisms are often accompanied by an increased alignment or integration of the different implementing agencies in order to further homogenise the donor's institutional face towards its partners and other donors, thereby facilitating donor coordination.

Such policy alignment does not only aim at better coordination with the international development community but also at increasing policy coherence within the donor country so as to reduce the effects of a donor's national policy on developing countries that frustrate their development efforts. Experience across DAC member countries shows that increasing such policy coherence is a challenging process as it often involves competing national interests.

Organisational and Administrative Set-up of Official Development Co-operation, by donor country, 2005

Donor country	Objective	Legislation or overall policy statement (OPS)	Ministries responsible for development aid	Implementing agencies	Interministerial co-ordination structures and ministerial advisory bodies	Regional/ Local actors
Austria	To combat poverty though economic and social development, ensure peace and human security, and preserve the environment and protect natural resources	Federal Act on Development Co-operation (2002, amended 2003)	Federal Ministry for Foreign Affairs	The Austrian Development Agency (ADA), Federal Ministry of Finance, Federal Ministry for Education, Science and Culture, Federal Ministry for the Interior Provinces, Ministry for Agriculture, Forestry, Environment and Water Management	ASA Board of Directors; the Advisory Board on Development Policy	Regions and municipalities
Belgium	Sustainable development to be achieved by combating poverty, on the basis of the concept of partnership and in acordance with the criteria for determining relevance to development	Law on Belgian Development Co-operation (1999)	Ministry for Development Co-operation; Ministry for Foreign Affairs	Belgian Technical Co-operation (BTC), Federal Ministry of Finance, Ministry of Foreign Affairs, National Ducriore Office, acting under the Directorate General for Development Cooperation (DGDC)	DGDC	Flemish Government, Walloon Government
Denmark	Through co-operation with governments and public authorities in developing countries, to support their endaveours aimed at providing economic growth, thereby making contributions to ensuring social progress and political independence in accordance with the aims and principles of the UN Charter, and to promote mutual understanding and solidarity through cultural co-operation	Act on International Development Co-operation (1971, amended 1998 and 2002) OPS: statement: Partnership 2000	Ministry for Foreign Affairs	The South Group within the Ministry for Foreign Affairs	The Board of International Development Co-operation, The Council of International Development Co-operation	–
Finland	To contribute to the eradication of extreme poverty	No special legislation, but OPS: Development Policy, Government Resolution (2004)	Ministry for Foreign Trade and Development Co-operation; Ministry for Foreign Affairs	Finnfund, The Service Centre for Development Cooperation	The Development Policy Committee	–
France	To support the achievement of sustainable development in partner countries, encouraging also poverty reduction, and to give particular emphasis to African countries, notably the least developed countries on that continent, and via its partnership with NEPAD	–	Ministry for Foreign Affairs assisted by the Ministry for Co-operation and Francophonie and the Ministry of the Economy, Finance and Industry	Ministry of the Economy, Finance and Industry, French Development Agency (AFD), other ministries, under the Directorate-General for International Co-operation and Development (DGCID) within the Ministry for Foreign Affairs	Interministerial Committee for International Co-operation and Development; the High Council for International Cooperation	Regions and municipalities
Germany	Reducing global poverty, safeguarding peace and making globalization equitable and sustainable, German Development Co-operation is contributing to common international efforts towards fulfillment of MDGs	No special legislation, but OPS: Programme of Action 2015 for Poverty Reduction	Ministry for Economic Co-operation and Development; Ministry of Foreign Affairs, Ministry of Finance	Agency for Technical Co-operation (GTZ), Bank for Development (KfW), Federal Foreign office, German Investment and Development Corporation (DEG), German Development Service (DED), InWEnt - Capacity Building International, under the Federal Ministry for Cooperation and Development	BMZ (co-ordinates German Development Co-operation with other ministries); Advisory Council to the Ministry	Federal States and municipalities

(Table continued 1)

Donor country	Objective	Legislation or overall policy statement (OPS)	Ministries responsible for development aid	Implementing agencies	Interministerial co-ordination structures and ministerial advisory bodies	Regional/ Local actors
Greece	To contribute to economic and social development, poverty reduction, strengthening of democracy and state of law, respect of human rights and fundamental freedoms, gender equality and protection of the environment	Law 2731/1999 and Presidential Decree 224/2000; OPS: second medium-term five-year development Co-operation programme	Deputy Minister for Foreign Affairs responsible for International Economic Relations and Development Co-operation; Ministry of the National Economy	Several other ministries, Hellenic Foreign Trade Board, Hellenic Organisation for Small and Medium Industries, National Tourist Association of Greece, under the Hellenic International Development Cooperation Department (Hellenic Aid) within the Ministry for Foreign Affairs	Committee for the Organisation and Co-ordination of International Economic Relations	–
Ireland	Reducing poverty and promoting sustainable development in some of the poorest countries of the world	No special legislation, but OPS: White Paper on Foreign Policy (1996)	Ministry of State with special responsibility for Development Co-operation and Human Rights; Ministry of Foreign Affairs, Ministry of Finance	The Development Co-operation Directorate within the Department of Foreign Affairs manages Development Co-operation Ireland (DCI)	Advisory Board for DCI	–
Italy	Development Co-operation is an integral part of Italian foreign policy and pursues the ideals of solidarity among peoples, seeking the fulfillment of fundamental human rights, in accordance with the principles sanctioned by the UN and European Commission African, Caribbean and Pacific States (EC-ACP) conventions	Law No 49/87 (1987)	Ministry of Foreign Affairs, supported by four Undersecretariats of State; Ministry of Economy and Finance	Directorate General for Development-Co-operation (DGCS) in the Ministry of Foreign Affairs	Interministerial Committee on Economic Policy	Regions and municipalities
Netherlands	Sustainable poverty reduction is the main objective	No special legislation, but OPS: Mutual interests, mutual responsibility: Dutch Development cooperation en route	Ministry for Development-Cooperation; Ministry of Foreign Affairs	Directorate-General for International Co-operation (DGIS) within the Ministry of Foreign Affairs	The Co-ordinating Council for International Affairs, The Co-ordination Committee for European Affairs	–
Portugal	Reinforce democracy and the rule of law, reduce poverty, stimulate economic growth, foster regional integration and promote European partnership for human development	Decree Law 5/2003 and OPS: The Portuguese cooperation for the incoming 21st century – Strategy Paper	Secretary of State for Foreign Affairs and Co-operation in the Ministry of Foreign Affairs; Secretary of State for European Affairs, Ministry of Finance	Institute for Portuguese Development Support (IPAD) in cooperation with 17 Ministries and agencies	–	Municipalities
Spain	The promotion of sustainable human, social and economic development in order to eliminate poverty	Law on International Co-operation in Matters of Development (1998)	State Secretariat for International Co-operation and Latin America within the Ministry of Foreign Affairs; Ministry of Economic Affairs, State Secretary for trade and tourism with the Ministry of Economic Affairs	State Secretariat for International Co-operation and Latin America (SECIPI) and its executing agency, the Spanish Agency for International Co-operation (AECI)	The Interministerial Committee for International Co-operation, The Interterritorial Commission for Co-operation in Matters of Development; the Council for Cooperation in Matters of Development	Autonomous Regions and municipalities

(Table continued 2)

Donor country	Objective	Legislation or overall policy statement (OPS)	Ministries responsible for development aid	Implementing agencies	Interministerial co-ordination structures and ministerial advisory bodies	Regional/ Local actors
Sweden	To contribute to an environment supportive of poor people's own efforts to improve their quality of life	No special legislation, but OPS: Act on Global Development (2003)	Ministry for International Development Co-operation assisted by a State Secretary; Ministry of foreign affairs, Ministry of Finance, Ministry of international economic affairs, Ministry for Industry and Trade	Swedish International Development Co-operation Agency (SIDA), Ministry of Finance, Ministry of Industry, Employment and Communications, Swedish Migration Board, The Swedish Institute, The North Africa Institute, under the Global Development Department within the Ministry of Foreign Affairs	Expert Group on Development Issues	–
Norway	The main objective is to contribute to the fight against poverty, by supporting partner countries' poverty reduction strategies and the other national strategies and thereby contribute to the achievement of the MDGs	No special legislation, but OPS: Policy Report No. 35 Fighting Poverty Together: A Comprehensive Development Policy (2003-2004) to the Storting	Ministry for International Development assisted by a State Secretary; Ministry of Foreign Affairs	Norwegian Agency for Development-Co-operation (NORAD), Fredskorpset (Norwegian Volunteer Service), under the Ministry of Foreign Affairs	–	–
Switzerland	To help developing countries improve the living conditions of their populations	The Federal Law on International Development Co-operation and Humanitarian Aid; OPS: SDC Strategy 2010, SECO Strategy 2006	Federal Councillor of Foreign Affairs, Federal Councillor for Economic Affairs	State Secretariat for Economic Affairs (SECO), Political Department IV of the Federal Department of Foreign Affairs; Swiss Agency for Development Co-operation (SDC) of the Federal Department of Foreign Affairs	Advisory Committee on International Development and Co-operation	Cantons and municipalities
UK	The elimination of poverty and the encouragement of economic growth which benefits the poor	International Development Act (2002); OPS: Eliminating World Poverty: Making Globalisation Work for the Poor (2000)	Secretary of State for International Development assisted by a Minister of State, and a Parlamentary Undersecretary of State; Chancellor of the Exchequer	Department for International Development; The Foreign and Commonwealth Office, The Home Office, The Treasury, The British Council	–	–
Japan	To contribute to peace and development of the international community and thereby help ensure Japan's own security and prosperity	OPS: Official Development Assistance Charter (2003)	Ministry of Foreign Affairs, Ministry of Finance	Japanese International Co-operation Agency (JICA), Japan Bank for International Co-operation (JBIC), several other ministries, Cabinet Office, Financial Agency, Police Office, under the Economic Cooperation Bureau within the Ministry of Foreign Affairs	Council of Overseas Economic Co-operation-related Ministers; Board on Comprehensive ODA Strategy	–
USA	–	Foreign Assistance Act (1961); OPS: US Department of State and US Agency for International Development: Strategic Plan for Fiscal Years 2004-2009	USAID Administrator, reports to the Secretary of State and Secretary of the Treasury	United States Agency for International Development (USAID); State Department, The Treasury-Office of International Affairs, The Millenium Challenge Corporation, several other departments, the Peace Corps	The National Security Council, Development Policy Co-ordination Committee (PCC) (chaired by the State Department) ; Advisory Committee on Voluntary Foreign Aid (ACVFA)	–

Source: OECD, DAC (2005); compilation and adaptation by Ifo Institute for Economic Research.

Although complete policy coherence may therefore not be feasible, it is obvious that the donor community has to reduce activity that is counterproductive to their own development policy goals and that severely harms aid efficiency and aid effectiveness. The ongoing discussion on the domestic agricultural subsidies of many donor countries – and the broad conviction that without a substantial reduction of these subsidies the UN goals for 2015 will surely not be attainable – provides strong arguments for urging donors to further increase the coherence (and resoluteness) of their development efforts.

R. O. and A. R.*

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Requirements on Geographic Mobility of the Unemployed

Eligibility conditions that relate to the behaviour of job seekers are able to offset and even reverse the disincentive effects on the level of unemployment that arise when unemployment benefits are paid without any such conditions. In most OECD countries, eligibility criteria for unemployment benefits include requirements on geographic mobility. In Germany, Norway and Sweden, there is a requirement for geographic relocation in principle, but the wording of legislation is often vague and the risk of being forced to accept a job at the other end of the country is probably very small. Requirements concerning travel-to-work, rather than geographic relocation, tend to be more precise in most countries, ranging from two hours in the United Kingdom to four hours in Belgium (Table). Some countries, such as France and Japan, do not have requirements on this count, while others, such as Austria, Norway and Sweden, require the unemployed to accept work anywhere in the country, in principle. Most countries have some waivers regarding the obligation to accept a job fulfilling these requirements, the most common one being not to jeopardize family life, but they are rarely precisely defined.

Failure to comply with eligibility requirements has an impact on benefits. When an unemployed worker refuses a suitable job because of lengthy commuting times, all or part of the benefits is suspended for a certain time. National practices vary considerably. The sanction for a first refusal can be as low as a loss of one week of benefit (UK) and as high as a total loss of benefits (the Netherlands). Sanctions increase for repeated refusals. In general, it is difficult to assess how these requirements are implemented in practice.

W. O.

Reference

OECD Employment Outlook 2005, pp. 105–06.

Conditions required for the unemployed to accept a job entailing commuting

	Distance and/or time of commuting	Family or other waivers	Sanction in case of refusal
Australia	Up to 90 minutes journey between home and place of work or number of people living in the same area who regularly commute; must cost less than 10 percent of wage.	–	First time: 18 percent reduction of allowance for 26 weeks; second time: 24 percent for 26 weeks; more than twice: disqualification for 8 weeks.
Austria	Full mobility if family life not jeopardized.	Yes	Suspension of benefits for 8 weeks.
Belgium	After 6 months, up to 4 hours commuting or absence from home of more than 12 hours; these conditions only valid if more than 25 km.	No	–
Czech Republic	No precise conditions; places outside region of residence should be included in job search unless serious family reasons proven.	Yes	Disqualification from entitlement and possibly from the list of job seekers.
Denmark	Up to 3 hours commuting during the first 3 months; more after. Workers with at least bachelor cannot refuse any transportation time if the vacancy cannot be filled otherwise.	Yes	First time: suspension of benefits for 3 weeks; disqualification from entitlement if two refusals in 12 months.
Finland	Job in home and neighbouring regions should be accepted; singles without children should even accept job outside this area.	Yes according to specified list of criteria (health, working hours, obligation to take care of children, etc.).	Suspension of benefits for 60 days: 90 days if repeated refusals.
France	No requirement.	–	–

(Table continued)

	Distance and/or time of commuting	Family or other waivers	Sanction in case of refusal
Germany	Up to 2 and 2.5 hours commuting if daily working is under or above 6 hours, respectively. Can be exceeded in regions that are further away. Unemployed can also be asked to move to take on a job unless important reasons and or important costs stand in the way.	Yes for moving.	Suspension of benefits for 3 weeks the first time, 6 weeks the second time, or 12 weeks any other time, with entitlement period cut accordingly.
Ireland	Full mobility within reasonable distance.	No	Suspension of benefits for 9 weeks.
Iceland	Requirements evaluated for each unemployed.	No	Suspension of benefits for 8 weeks.
Italy	Commute of up to 50 km.	No	Loss of unemployment seniority?
Japan	No requirements.	–	–
Netherlands	Commute of up to 3 hours daily with public transport.	No	Disqualification from entitlement to benefits.
Norway	Full mobility within the country.	For older workers or important social reasons including responsibility of children; no obligation if wage inferior to unemployment benefit.	Suspension of benefits for 8 weeks the first time. 12 weeks for the second time in 12 months, 6 months if three times in a year.
Portugal	Full mobility if no serious hindrance to the unemployed or his/her family.	Yes	Disqualification from entitlement.
Spain	Less than 30 km except if commuting time exceeds 25 percent of daily working time; must cost less than 20 percent of wage with a lower limit on the wage minus cost trip equal to the minimum wage.	Yes	Suspension of benefits for 3 months the first time, 6 months the second time.
Sweden	Full mobility within the country after the first 100 days of unemployment.	Yes for certain family reasons, for medical reasons, lack or high costs of transport or problems in finding accommodation; no obligation if wage less than 90 percent of daily unemployment benefit.	25 percent reduction in benefits for 40 days the first time, 50 percent for 40 days the second time, disqualification from entitlement if third time.
United Kingdom	Up to 1 hours commuting distance each way.	Yes for religious or conscientious objection, or harmful to health.	Between 1 and 26 weeks of suspension of benefits.
United States	Required commuting distance varies according to area: travel expenses can be taken into account in some states.	–	Disqualification from entitlement in most states; suspension (1 to 10 weeks in some) in a few states, with benefit amount sometimes reduced when suspension terminates.

Source: OECD based on Danish Ministry of Finance (2004), availability criteria in 25 countries.

New at DICE Database

In the first quarter of 2006 two major additions have been made to the DICE Database (free access: www.cesifo.de/DICE).

One is *values* shared by the majority of people in a country. We consider values to be part of the institutional framework which shapes behaviour and decisions of economic agents. The values we report about in DICE have been identified by way of surveys, conducted by World Values Survey. The tables about values can be found under *Basic Country Characteristics/Population* (and, of course, also by help of the search function).

The other major addition consists of the results of the recent *PISA study* (to be found under *Education*). Moreover, the growing inventory of the DICE Database (more than 1800 entries at present) has been – and is being – continuously updated.

Forthcoming Conferences

Global Economy
Munich, 7 – 8 April 2006

This is the third area meeting for CESifo's Global Economy group. Topical questions are how the gains from globalisation differ from those from trade, causes and effects of marginalisation, the role of culture and local identity, new forms of global institutions and arrangements.

Scientific organiser: John Whalley

Public Sector Economics
Munich, 21 – 23 April 2006

This CESifo Area Conference provides an overview of the current research undertaken by members of the Public Sector Economics area of the CESifo network. Its objective is to stimulate interaction and cooperation between them. All CESifo research network members are invited to submit papers.

Scientific organiser: Frederick van der Ploog

Munich Economic Summit
Munich, 4 – 5 May 2006

The Summit, jointly organised by the CESifo Group Munich and the BMW Foundation Herbert Quandt, will address the challenges posed to Europe by the new global division of labour.

Employment and Social Protection
Munich, 26 – 27 May 2006

This CESifo Area Conference gives CESifo members the opportunity to present and discuss their ongoing research. All CESifo research network members are invited to submit papers.

Scientific organiser: Kai A. Konrad

Global Economic Imbalances: Prospects and Remedies
Munich, 2 – 3 June 2006

The issues to be treated at the fourth CESifo-Delphi Conference (second part) include the role of the euro in a changing international environment, the viability of the US current account deficit, multilateral exchange rate regimes and policy coordination, financial and exchange rate crises, the role of currency and trading blocs.

Scientific organisers: Helge Berger, Thomas Moutos and Sarantis Kalyvitis

CESifo Venice Summer Institute 2006
Venice, Italy, Island of San Servolo,
17 – 22 July 2006

CESifo will host its seventh Summer Institute in Venice, bringing together international economists working on economic policy topics for workshops, panel meetings and discussion.

New Books

European Merger Control
Fabienne Ilzkovitz (ed.)
Edward Elgar, 2006

Institutional Economics and Fishery Management
Elizabeth H. Petersen
Edward Elgar, 2006

Intellectual Property Rights and the EC Competition Rules
Valentine Korah
Hart Publishing, 2006

Labour Market Adjustments in Europe
Julian Messina (ed.)
Edward Elgar, 2006

Financial Institutions and Services
Robert S. Uh (ed.)
Nova Publishers, 2005

Stability- and Growth-Pact – Experience and Future Aspects
F. Breuss (ed.)
Springer, 2005

A joint initiative of Ludwig-Maximilians-Universität and the Ifo Institute for Economic Research

CESifo Forum

Spring 2006

Volume 7, No. 1

Focus

Mergers and Acquisitions

Johan Stennek
Kevin Gardiner
José Manuel Campa
Steven Brakman,
Harry Garretsen and
Charles van Merrewijk
Simon J. Evenett
Arndt Christiansen
Hans-Martin Zademach

Pro and Contra

After the EP vote: The draft Services Directive

Pro: ETUC
Contra: UNICE

Spotlights

International competitiveness

EU25 innovation gap

Trends

Statistics update

Three Years DICE Report
2003 – 2005
Topical discussions in the rubric ”Forum“

		Topics in ”Forum“	Contributions by
2003 (Vol. 1)			
	No. 1	Pension Reforms in Europe	Eric Thode, Martin Werding
	No. 2	Labour Market Institutions and Unemployment	Michèle Belot/Jan van Ours, Lars Ljungqvist, Stephen Nickell, Ronald Schettkat, Franz Traxler
	No. 3	Reform Proposals for Health-care Systems	Stefan Felder, St. Fölster/R. Gidehag/M. Orszag/ D. J. Snower, Klaus-Dirk Henke/Katja Borchardt, Volker Meier
	No. 4	Reconciling Work and Family	David M. Blau, John M. Evans/Samantha Callan, Janet C. Gornick/Marcia Meyers, Lawrence M. Kahn, Sheila B. Kamerman
2004 (Vol. 2)			
	No. 1	Decentralising the Public Sector	Fritz Breuss/Markus Eller, Leonardo E. Letelier, Jorge Martinez-Vazques/ Joao do Carmo Oliveira, Ugo Panizza, Anwar Shah/Theresa Thompson/ Heng-fu Zou
	No. 2	Institutions and Performance	Thorvaldur Gylfason, Dani Rodrik, Gérard Roland
	No. 3	Dual Income Tax	Robin Boadway, Vidar Christiansen, Margit Schratzenstaller, Christoph Spengel/ Wolfgang Wiegard
	No. 4	Institutions for Better Education	Georgio Brunello, Peter Dolton, David N. Figlio/ Maurice E. Lucas, Eric A. Hanushek, Thomas Nechyba, George Psacharopoulos, Ludger Wößmann
2005 (Vol. 3)			
	No. 1	Privatisation	Ansgar Belke/Friedrich Schneider, Michel Berne/ Gérard Pogorel, Bernardo Bortolotti, Ioannis N. Kessides, William L. Megginson/Jeffry M. Netter/ Candra S. Chahyadi
	No. 2	Welfare to Work	Gerard J. van den Berg/Bas van der Klaauw, Rebecca M. Blank, Jeffrey Grogger/Lynn A. Karoly, Ivar Lodemel, Wolfgang Ochel
	No. 3	City Toll	Richard Arnott, Kian-Keong Chin, Todd Litman, Tilmann Rave, Ronnie Schöb, Catharina Sikow-Magny/Marcel Rommerts
	No. 4	Railway (De-)Regulation	Chris Bolt, Marc Ivaldi, Günter Knieps, Fumitoshi Mizutani, Jan Scherp

All articles, including those of the rubrics ”Research Reports“ and ”Reform Models“, are available for download (www.cesifo.de).