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# Over-indebtedness

New evidence from the EU-SILC special module



Social Situation Observatory – Income distribution and living conditions

Applica (BE), European Centre for the European Centre for Social Welfare  
Policy and Research (AT), ISEER – University of Essex (UK) and Tárki (HU)

Nicole Fonderville, Erhan Özdemir and Terry Ward

Applica

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## Introduction

The economic recession which followed the financial crisis which began in 2008 and the job losses which it gave rise to, coupled with a continuing squeeze on credit, has triggered concerns that a substantial and growing number of households would have difficulty managing the debts which they built up in the years leading up to the crisis. There is some evidence in the countries hit hardest by the recession, which are also to a large extent those which experienced the biggest build-up of household debt before the crisis, that this indeed has occurred. The concern here is to examine the extent of this accumulation of consumer debt across the EU, the form which it has taken and the extent to which it has been associated with problems of servicing interest charges and debt repayments among the households concerned, especially as the financial crisis has reduced the possibility of rolling over debt, or of accessing new sources of borrowing to cover existing loans.

The concern is also to examine the types of household which are likely to become over-indebted in the sense of having difficulty in servicing their outstanding loans in terms of their income level and other characteristics – the age of the people concerned and the extent to which they have children, in particular. This is based on the special ad hoc module included as part of the 2008 EU-SILC which contained questions on indebtedness and the amount of credit which households have outstanding as well as on access to bank accounts, credit cards and other sources of borrowing. It included, in addition, questions on the underlying reasons for households getting into debt and the extent to which it is associated with a sudden drop in their income, the responses to which are also considered here.

Although the data collected by the special module relate to the situation two years ago before the financial and economic crisis really began to affect households, analysis of them should, nevertheless, provide an insight into the kinds of household likely to have been affected by over-indebtedness over the past two years – and, indeed, which are over-indebted at the present time.

First, however, it is instructive to consider the issues associated with over-indebtedness and how it relates to the build-up of household debt.

## Methodological and theoretical issues

### Definition of over-indebtedness

As a starting-point, there is a need both to define over-indebtedness and to measure it in a practical way. There is no standard definition of over-indebtedness used in the EU and, accordingly, no set of standardised, and harmonised, statistics on it (European Commission, 2008). In the UK for example, the focus has been put on being in arrears in paying regular bills, over-indebtedness being defined as a situation “*where households or individuals are in arrears on a structural basis, or at a significant risk of getting into arrears in a structural basis*” (OXERA, 2004). In Germany, it has been defined as a situation where household income “*in spite of a reduction of the living standard, is insufficient to discharge all payment obligations over a long period of time*” (Haas, 2006).

A study carried out for the European Commission to develop a common definition across the EU put forward a set of criteria to be applied:



- The unit of measurement should be the household because the income of individuals can be pooled – and indeed, is usually assumed to be pooled – between household members.
- Indicators need to cover all financial commitments of households – borrowing for housing purposes, consumer credit, paying utility bills, meeting rent and mortgage payments and so on – and not be confined to just one aspect.
- Over-indebtedness implies an inability to meet recurring expenses and, therefore, it should be seen as an ongoing rather than a temporary, or one-off, state of affairs.
- It is not possible to resolve the problem simply by borrowing more.
- For a household to meet its commitments requires it to reduce its expenditure substantially (or find ways of increasing its income)<sup>1</sup>.

An over-indebted household is, accordingly, defined as one whose existing and foreseeable resources are insufficient to meet its financial commitments without lowering its living standards, which has both social and policy implications if this means reducing them below what is regarded as the minimum acceptable in the country concerned.

Such a definition, however, though it might be widely accepted in principle, gives rise to problems when it comes to measurement, since it is difficult, in practice, to identify households which are in such a situation. In consequence, empirical studies have tended to adopt more practical definitions. These include, in particular, households which report in surveys that they have difficulty meeting mortgage or rent commitments and/or paying utility and other regular bills<sup>2</sup> or that they are unable to make ends meet as well as more 'objective' indicators, such as being arrears on regular payments<sup>3</sup> or being subject to formal debt settlement, or debt collection, arrangements.

The difficulty with subjective indicators is that they inevitably depend on individual interpretation of terms such as 'difficulty', which is likely to vary both between households within countries and, perhaps even more, between those in different countries, where attitudes and norms can vary. 'Objective' indicators, such as the number of cases of debt settlement through administrative or judicial procedures, however, are not necessarily more satisfactory, since, equally inevitably, the rules governing such procedures and the policies and practices in place to avoid their implementation being necessary can vary just as much between countries (and perhaps also between regions within countries)<sup>4</sup>. Although the use of data on arrears in making payments avoids these kinds of problem to some extent, in the sense that it is an objective rather than a subjective indicator and it is not subject to rules or regulations, it does not avoid difficulties of comparison completely. It still remains to judge the seriousness of the arrears and the scale which represents over-indebtedness, which itself will tend to depend on the situation in different countries (social norms as well as the regulations in place governing late payment) and the financial circumstances of the household (whether the arrears are a temporary or longer-term phenomenon and the ease or difficulty of making good the arrears, in particular).

Economic indicators have also been used to measure – rather than to define – over-indebtedness, usually in the form of outstanding debt-to-income ratios or the costs of servicing debt relative to income. While these are clearly objective indicators, they are

<sup>1</sup> European Commission, 2008

<sup>2</sup> Such as Betti et al., 2007.

<sup>3</sup> Such as Bridges and Disney, 2004 and Kempson et al., 2004.

<sup>4</sup> See, for example, Niemi-Kiesiläinen and Henrikson, 2005.



also aggregate ones which do not necessarily reflect the financial position of individual households. In other words, the distribution of outstanding debt is likely to be as important as the overall amount if not more so. Debt can, therefore, increase relative to income without this necessarily being associated with problems of managing debt becoming more acute if the increase occurs predominantly among those with high levels of income. In addition, if it accompanies relatively high growth in income with interest rates remaining unchanged or even falling, it may be associated with problems of servicing debt becoming less rather than more acute, in the sense that the rise in income exceeds the increase in debt servicing costs in terms of meeting interest and capital repayment schedules.

Moreover, while an increase in outstanding debt might be accompanied by growing difficulties of servicing the borrowing concerned, it might equally be accompanied by an increase in the value of assets which are often the counterpart of debt. In other words, much of the debt accumulated tends to be for the purchase of assets which might be of a similar or even higher value than the debt in question. Households, therefore, might be able to meet their debt servicing obligation by selling some of the assets concerned, though this might be problematic if the assets involved consist of the home in which they are living.

Furthermore, the ease or difficulty of managing debt and the servicing costs associated with it, depends in large measure on the availability of credit and the access to it of the households with heavy debt burdens. An expansion of credit ought, therefore, to make it easier for households to manage their debt and cope with any temporary reduction in income which they might experience during an economic downturn if they lose their jobs or suffer a reduction in earnings. At the same time, however, any additional take-up of credit on the part of households itself adds to the debt which they need to service.

Studies have found that, although there is no clear point at which debt becomes problematic, there is a link between the ratio of debt to income and the probability of debt being a heavy burden on households<sup>5</sup>, while equally an increase in the ratio has been found to be associated with higher levels of arrears<sup>6</sup>.

Nevertheless, it is arguable that problems of managing debt, and of covering the costs of servicing loans, are likely to increase rather than diminish if there is a cutback in credit – which will tend to show up as a reduction in the ratio of outstanding debt to income – such as occurred in the wake of the financial crisis which began in 2007 and became increasingly serious in 2008. This is even more likely to occur if such a cutback is accompanied by a downturn in economic activity, job losses and rising unemployment. In these circumstances, households will tend to experience increasing difficulties of extending their loans and of maintaining current levels of expenditure. Equally, the assets against which they have borrowed will tend to decline in price, so making it harder for them to manage their debt by selling them off or by using them as collateral to borrow more.

Accordingly, as credit is reined in, the statistics might tend to show a reduction in outstanding debt, or at least a marked slowdown in its rate of growth, coupled with a growing number of households being in arrears on payment of bills, defaulting on their debt and, generally, having difficulty making ends meet. In consequence, in this situation, a negative relationship between increases in the ratio of debt to income and household

<sup>5</sup> See, for example, Del Rio and Young, 2005.

<sup>6</sup> See Rinaldi and Sanchez-Arellano, 2006.



financial problems might be observed instead of a positive one, and it could be argued that such problems are caused not by a rapid growth of credit but that growth coming to an end. Nevertheless, it is equally arguable that the cutback in credit, in practice, has its roots in the over-expansion of credit – and debt – in earlier periods.

At the same time, it needs to be recognised that there is no easy way of distinguishing between a cutback in credit on the part of lenders and a reduction in demand for credit on the part of borrowers. Both will be associated with a decline in the statistics on the amount of debt outstanding and, indeed, might occur at the same time. A downturn in economic activity tends, therefore, to deter financial institutions from lending because of the greater risks involved and equally to deter households from borrowing because of the increased uncertainty about future income streams and the capacity to service the loans concerned.

Whatever the underlying processes involved, it is evident that there is no simple relationship between the accumulation of debt and the scale of financial difficulties experienced by households and, equally, no simple solution. A reduction in the supply of credit might prevent households from getting into financial difficulties but it is also likely to mean growing problems for those with debts that need to borrow in order to service them, perhaps because their main source of income has dried up or diminished markedly as a result of the recession.

This issue, insofar as possible, is considered below by examining changes in the amount of household debt outstanding over recent years in relation to the evidence from surveys on the extent of the financial problems of households as reflected in arrears in paying bills and in the difficulties reported in making ends meet.

### **The build-up of household credit**

A consistent set of comparable data on the amount of consumer credit outstanding is available only since the mid-1990s for most EU Member States. This, however, indicates that the build-up of debt in the majority of cases occurred predominantly over the period from then up to the start of the recent recession. In 1995, there were only 5 Member States – Denmark, Germany, the Netherlands, Sweden and the UK – in which the amount of outstanding credit of households exceeded 60% of their disposable income and in only two of these, Denmark and the UK, was it more than 80%, though in the latter, it was close to 100% of disposable income and in the former, well over 100% (136%) (Table 1). (Although data are not available for 1995 for some EU15 countries and for most of the countries which have entered the EU since 2004, it is clear from the years for which there are data, that outstanding credit in these countries was well below 60% of disposable income and in the Central and Eastern European countries, below 10%.)

Outstanding household credit increased significantly relative to disposable income in nearly all countries from 1995 on, though the rate of growth slowed between 2000 and 2002 in a number of cases and in Germany, outstanding credit declined relative to disposable income. From 2002, however, growth regained momentum in all EU Member States, except Germany, where credit continued to decline relative to household income (96% in 2002 to 87% in 2007). In the EU, excluding Germany (and a few other smaller countries for which data are not available for all years), therefore, the outstanding amount of household credit increased from 69% of disposable income in 2002 to 96% in 2006, a rise of almost 40% in the proportion in just four years. In 2007, credit continued to increase relative to disposable income, but at a slower rate.



The build up of credit in the second half of the 1990s was particularly marked in the Netherlands and Portugal, in both of which it increased by around 50 percentage points relative to disposable income between 1995 and 2000 (rising to 120 of disposable income in the former and 80% in the latter). After 2000, the growth of credit was especially pronounced in Denmark, where the outstanding amount was already larger than anywhere else relative to household income, and Ireland, in both of which credit increased by around 90 percentage points in relation to disposable income between 2000 and 2007 (in Denmark to over 270% income).

Table 1 Household credit outstanding, 1995-2009 (% household disposable income)

	1995	2000	2002	2004	2005	2006	2007	2008	2009
BE	<b>58.9</b>	65.2	63.5	69.4	73.8	77.6	81.2	83.5	86.3
BG				19.0	28.7	34.1	46.1	<b>50.8</b>	<b>51.8</b>
CZ	6.5	6.7	13.3	21.2	26.5	31.8	39.0	43.6	47.4
DK	136.4	181.2	191.5	210.1	232.0	251.8	272.7	277.5	282.8
DE	77.1	97.4	95.6	93.3	91.6	89.7	86.9	84.1	83.6
EE	<b>2.9</b>	12.5	18.8	36.6	54.1	73.5	81.9	84.5	92.0
IE	49.3	70.6	86.1	119.0	141.8	153.6	159.5	141.8	141.8
EL	10.9	16.5	27.5	39.9	49.3	57.8	62.4	68.4	67.4
ES	50.6	66.2	73.8	87.7	104.5	117.7	124.6	123.1	120.8
FR	47.1	50.5	51.3	57.2	61.5	65.4	68.8	70.4	71.6
IT	<b>23.5</b>	31.8	33.1	38.8	42.4	45.4	48.1	47.7	50.0
CY									
LV		5.8	11.1	29.0	47.8	68.6	77.7	68.6	68.5
LT	<b>1.8</b>	1.9	3.7	12.2	20.0	29.6	41.9	42.8	47.5
LU									
HU	<b>7.1</b>	7.5	14.3	24.1	28.7	33.9	40.3	51.2	52.5
MT	11.6	24.7	43.9						
NL	<b>72.1</b>	120.7	128.7	164.2	176.9	188.0	188.3	194.2	199.8
AT	<b>35.5</b>	43.4	46.9	61.8	68.3	67.5	68.2	68.9	68.3
PL	<b>4.1</b>	13.1	14.7	17.1	20.5	26.1	33.7	45.4	48.7
PT	<b>29.8</b>	79.9	87.6	88.6	94.4	104.8	113.0	112.3	116.8
RO		0.5	1.8	7.6	11.7	19.6	26.5	<b>29.1</b>	<b>32.3</b>
SI			17.9	19.4	22.7	27.3	31.9	33.6	36.5
SK	<b>4.6</b>	5.2	7.4	16.0	20.4	26.3	27.9	32.7	35.5
FI	<b>53.4</b>	50.7	60.0	69.6	78.3	84.7	88.6	90.3	92.7
SE	<b>74.5</b>	86.1	90.2	105.4	115.2	122.9	127.4	130.8	139.1
UK	<b>99.0</b>	107.4	122.2	144.0	148.4	157.6	166.4	165.1	164.9
EU	<b>61.3</b>	73.5	73.9	76.4	80.0	84.7	89.2	93.8	96.9

*Note: The figures in bold italics are estimated on the basis of Eurostat data for the debt-to-income ratio of households, which are close to but not the same as the ECRI data for outstanding credit. The figure for Spain in 1995 relates to 1997 and for Ireland and Greece, to 1998. The figures in italics for 2009 involve estimation of disposable income, based primarily on the change in GDP between 2008 and 2009.*

*Source: European Credit Research Institute (ECRI), Lending to households in Europe, 1995-2009 and Eurostat, National accounts*

Growth was also high in Spain and the UK, in both of which the amount outstanding expanded by almost 60 percentage points relative to disposable income, and Greece,



where it increased by 46 percentage points, while in both Finland and Sweden, the rise was around 40 percentage points. In both Ireland and the UK, as well as Denmark, the outstanding credit of households in 2007 stood at over 150% of disposable income, while in the Netherlands, it was only marginally below. In another two countries, Spain and Sweden, it was around 125% of disposable income and in Portugal, just over 110%. In addition, there were another four countries (Belgium, Germany, Estonia and Finland, where the amount was over 80% of disposable income in 2007, making 11 in all where this was the case as opposed to just two in 1995.

The build-up of credit was especially rapid in some of the Member States which have entered the EU since 2004. This is particularly the case in Estonia, where outstanding credit amounted to only just over 12% of disposable income in 2000 but increased to 82% by 2007, and in Latvia, where it rose from under 7% of disposable income in 2000 to almost 70% in 2007. In Lithuania, Hungary, the Czech Republic and Bulgaria, outstanding credit had also risen to over 40% of disposable income by the onset of the financial crisis.

The effect of the financial crisis was to reduce the amount of credit outstanding as banks and other lenders cut back on loans and, at the same time, as households reduced their demand for borrowing (as evident in the housing market in particular), though the effect was by no means uniform across countries. In the EU as a whole, the amount outstanding declined by nearly 5 percentage points relative to disposable income in 2008 as well as in absolute terms. The reduction was particularly large in Ireland where it amounted to around 18 percentage points in relation to income. Outstanding credit also declined, though only slightly, in Spain, Italy, the Netherlands, Portugal, the UK as well as in Germany, though in the last this merely continued the downward trend over the years leading up to the crisis. It declined as well in Lithuania, where it had risen rapidly in the preceding years. In all other countries, however, the amount of credit increased in 2008, though only by a little in most cases.

Credit outstanding in the EU as a whole declined again in 2009 relative to disposable income, though the reduction was concentrated in a few of the larger countries – Germany (continuing the long-term downward tendency), Spain and the UK as well as in Greece and Austria – and in most countries, there was an increase in the ratio. (It should be noted that because data on disposable income for 2009 are not yet available from Eurostat for most countries, the figures for this have been estimated from the data on GDP and consumer expenditure which are available; the figures will be updated as soon as the actual data are published.) In many of the countries in which an increase occurred, however, this was due to a decline in disposable income rather than an expansion in credit.

The amount of credit outstanding in value terms (i.e. before taking account of inflation), therefore, declined in Ireland by 6% in 2009, continuing the fall in 2008 and resulting in an overall reduction of almost 13% between 2007 and 2009. The amount in value terms also declined in the three Baltic States (by 3-5%) as well as in Spain, though by less (by only 1%), while it remained broadly unchanged in Germany, the UK and Austria. By contrast, the value of outstanding credit increased markedly in a number of the Member States which entered the EU in 2004, especially in Poland and Cyprus (by 12-13% in each), which were hit much less by the financial and economic crisis than other countries (in Poland, GDP grew in 2009 and in Cyprus, it fell by under 2%). It also increased significantly in the Czech Republic and Slovakia (by 11-12% in each), as well as in Sweden and Luxembourg (by 8-9%), where the extent of the fall in GDP was much the same as the EU average, and in Slovenia (by 7%), where the fall in GDP was much larger (by 8%). In all these countries,





therefore, the expansion of credit is likely to have made it easier for households to cope with any reduction in disposable income brought about by the recession, though at the same time, it will inevitably have been accompanied by an increased need to service the debit entailed.

## The composition of debt

Loans for housing make up a large part of household debt and were the main source of the build-up of debt in the run-up to the financial crisis. Borrowing to buy, maintain or improve houses accounted for just over 61% of the total amount of outstanding credit to households in the EU in 2000. By 2006, in just 6 years, this had increased to 71%. In 2000, the stock of credit extended for housing purposes amounted to 45% of household disposable income in the EU as a whole. By 2006, this had risen to 67% and by 2007, to 68%, an increase of 50% over the 7-year period (Table 2).

Table 2 Housing loans outstanding, 2000-2009 (% household disposable income)

	2000	2002	2004	2005	2006	2007	2008	2009
BE	43.9	44.0	50.0	54.2	57.9	61.1	63.5	66.6
BG			4.3	8.1	12.9	18.8	<b>21.7</b>	<b>22.7</b>
CZ	1.9	8.0	14.8	18.4	22.7	28.8	28.5	33.2
DK	148.5	160.4	179.6	198.6	214.5	229.3	234.6	243.1
DE	48.3	49.0	49.7	49.7	49.7	48.6	47.1	46.8
EE	8.1	13.4	29.3	44.6	60.6	66.4	68.1	75.2
IE	54.1	67.3	96.3	116.7	128.1	133.3	117.8	120.6
EL	10.9	18.5	25.8	32.4	38.4	41.5	45.3	45.3
ES	41.9	49.1	60.9	75.8	86.5	92.4	91.6	90.4
FR	31.9	33.3	38.7	42.9	47.1	50.5	52.5	53.8
IT	11.8	14.5	19.2	21.9	23.8	25.1	24.2	25.4
CY								
LV	3.6	6.3	18.0	30.6	46.6	54.9	47.8	47.9
LT	0.4	2.1	8.4	13.8	19.3	28.0	29.7	34.2
LU								
HU	2.3	7.8	15.6	16.9	20.1	21.1	24.4	27.5
MT	13.9	31.7						
NL	104.4	112.5	146.4	159.7	169.1	171.5	178.1	184.1
AT	20.0	26.5	31.8	33.7	36.1	37.0	38.8	39.1
PL	1.9	3.2	6.2	7.9	11.2	16.3	20.0	26.7
PT	58.9	68.2	69.4	75.0	83.5	89.3	88.5	93.0
RO				2.9	4.0	5.3	<b>6.1</b>	<b>7.8</b>
SI			4.6	7.3	9.9	12.5	14.6	17.0
SK			11.0	13.4	17.3	18.7	22.1	24.1
FI	34.7	40.1	48.2	55.0	60.1	63.6	65.4	67.7
SE	0.0	53.7	66.9	72.3	80.7	80.3	75.6	96.0
UK	79.7	90.0	107.9	118.0	129.6	126.8	112.2	135.3
EU	45.2	47.0	48.8	52.6	56.5	61.8	66.8	67.9

Note: The figures in italics for 2009 involve estimation of disposable income, based primarily on the change in GDP between 2008 and 2009.

Source: European Credit Research Institute (ECRI), Lending to households in Europe, 1995-2009 and Eurostat, National accounts



In 2000, there were just two countries, Denmark and the Netherlands, where loans for housing purposes accounted for over 80% of the total household credit outstanding. In 2007, there were 6 (Ireland, the UK, Luxembourg and Estonia as well as Denmark and the Netherlands). By 2007, the outstanding credit for housing alone amounted to over 100% of disposable income in Denmark, the Netherlands, Ireland and the UK, around 90% in Spain and Portugal and over 80% in Sweden, having increased by over 50 percentage points in relation to income in all of the countries apart from Sweden and by around 80 percentage points in Denmark and Ireland.

In 2008, the credit outstanding on housing declined relative to disposable income across the EU, before increasing again in 2009, though as in the case of total household credit, this was primarily a result of a reduction in disposable income. In the countries noted above in which the overall amount of credit outstanding declined or remained much the same in value terms (Ireland, Spain, the three Baltic States, Germany and the UK), this was also the case for the stock of housing loans. Equally, the countries in which total credit outstanding increased markedly in value terms (Poland, Cyprus, the Czech Republic, Slovakia and Sweden) also showed a significant increase in housing credit, though there was a pronounced increase in Slovenia and Romania as well, where the expansion of overall credit was smaller. The behaviour of the total outstanding credit of household has, therefore, been very much determined by changes in housing loans.

The contribution of consumer credit to total household debts has, accordingly, tended to decline over recent years, whereas in the 1990s, it had increased as a share of the total in a number of countries (in France, Italy and Greece, for example). In 2007, it accounted for only just over 15% of total credit outstanding, down from almost 18% in 2000. Nevertheless, consumer credit still tended to increase relative to disposable income – from 13% in 2000 to 15% in 2007 in the EU as a whole, before declining to just over 14% in 2009 (Table 3)..



Table 3 Consumer credit outstanding, 2000-2009 (% household disposable income)

	2000	2002	2004	2005	2006	2007	2008	2009
BE	8.0	8.0	8.1	8.2	8.5	9.0	9.3	9.1
BG			12.4	17.7	18.1	23.9	<b>26.0</b>	<b>26.5</b>
CZ	1.9	3.2	4.6	5.7	6.5	7.4	8.4	9.0
DK	15.7	13.5	13.7	14.0	15.3	17.9	17.6	15.1
DE	15.7	15.1	15.4	14.9	14.3	13.7	13.4	13.5
EE	0.8	1.7	3.3	4.8	7.5	9.3	9.3	9.3
IE	13.9	16.0	19.2	20.4	19.5	19.7	18.6	18.6
EL	5.3	8.6	13.0	15.6	17.9	19.2	21.3	20.3
ES	11.5	11.2	11.4	13.0	14.5	15.3	14.3	12.9
FR	11.9	11.6	12.0	12.3	12.3	12.3	11.9	11.7
IT	4.5	5.1	6.3	7.3	8.3	9.2	9.7	10.2
CY								
LV	1.6	2.4	4.3	6.4	8.5	8.4	7.6	7.1
LT	0.3	0.4	1.8	3.3	4.8	6.1	6.2	5.8
LU								
HU	2.2	3.2	5.8	9.1	12.3	16.6	22.7	23.4
MT	5.4	3.7						
NL	6.2	7.4	9.1	9.3	9.3	8.6	8.6	8.4
AT	18.2	16.4	16.2	17.3	14.9	14.2	13.3	12.6
PL	11.1	8.2	8.3	9.6	11.0	13.6	16.8	18.2
PT	9.5	8.3	8.9	8.9	10.4	12.2	13.1	13.3
RO				8.6	15.2	20.4	<b>21.6</b>	<b>23.4</b>
SI			10.5	10.5	11.6	12.8	12.4	12.6
SK			2.5	2.8	4.0	3.8	4.4	4.9
FI	4.4	8.6	9.3	10.7	11.3	11.5	11.7	11.7
SE	0.0	6.6	7.1	7.7	8.4	8.7	8.9	9.1
UK	20.6	23.3	25.4	25.8	25.2	25.4	25.5	24.8
EU	13.0	13.2	14.0	14.5	14.6	14.9	14.8	14.4

Note: The figures in italics for 2009 involve estimation of disposable income, based primarily on the change in GDP between 2008 and 2009.

Source: European Credit Research Institute (ECRI), *Lending to households in Europe, 1995-2009* and Eurostat, *National accounts*

The growth of consumer credit between 2000 and 2007 was widespread across the EU, with only Germany and Austria showing a decline over the period. It was particularly pronounced in Greece and Hungary, where it increased by 14 percentage points in relation to disposable income, as well as in the three Baltic States and the Czech Republic, where it rose by 6-8 percentage points, though in each case from a low starting level. The expansion was even more rapid in Bulgaria and Romania, where the overall amount of consumer credit outstanding had increased to over 20% of disposable income by 2007. These, however, were the only countries in the EU, apart from the UK (25%), in which consumer credit outstanding was this high relative to disposable income, though it was only slightly below 20% in Ireland and Greece (over 19% in both cases). In 9 Member States, consumer credit outstanding amounted to less than 10% of disposable income. These include the three Baltic countries and the Czech Republic, where consumer credit expanded rapidly up to the financial crisis, as well as Slovakia, where the figure at less than 4% of disposable income was smaller than anywhere else in the EU. They also include Belgium, the Netherlands, Italy and Sweden.

In 2008, consumer credit continued to decline relative to disposable income in Germany and Austria and also diminished in Ireland and Spain, where the financial crisis hit the



economy earlier than in most other Member States. It declined as well in Latvia, while remaining much the same in the other two Baltic States and the UK. In most other Member States, however, it increased, especially in Hungary, Poland, Bulgaria and Romania.

In 2009, on the other hand, the amount of consumer credit outstanding declined or remained much the same in the majority of countries. In 13 Member States, it fell in value terms and increased by very little (by under 3%) in 6 others. The decline in the value of credit outstanding was particularly marked (by over 10%) in the three Baltic States and Denmark and only slightly smaller in Spain (9%). By contrast, outstanding credit increased markedly in value terms in Cyprus, Poland, the Czech Republic and Slovakia (by 10-16%), in line with the expansion of overall credit.

The outstanding amount of other loans to households, apart from for housing and consumer credit, also increased in most countries over the period 2000-2007. In the EU as a whole, it rose from 11% of disposable income to 12%, with steep increases in particular in Austria (by 12 percentage points relative to disposable income), Denmark (by 9 percentage points), Sweden (by 6 percentage points), Ireland and Spain (by around 4 percentage points) as well as in Latvia, Lithuania and Slovakia (by 5-7 percentage points). It declined equally steeply, however, in Germany (by 9 percentage points relative to disposable income), and less so in Belgium, the Netherlands and Italy, while remaining broadly unchanged relative to income in France, the UK and Portugal (Table 4).

The actual amount outstanding in 2007 varied equally widely in relation to disposable income, reflecting in part the availability, or lack of it, of consumer credit, though only to a small extent. It was, therefore, far larger in Sweden, where the amount of consumer credit outstanding was relatively small, than anywhere else, at 37% of disposable income, and relatively small in the UK and Ireland (at only around 5-6% of disposable income), as well as in Bulgaria and Romania, where consumer credit was larger elsewhere. On the other hand, it was also relatively large in Germany and Denmark (at around 25% of disposable income) and, to a lesser extent in Spain (around 17% of disposable income), where consumer credit was around the EU average in scale.

In 2008, there was a widespread reduction in other loans outstanding relative to disposable income, especially in Ireland and Latvia (by over 1 percentage point), as the financial crisis began to hit, as well as in Germany, continuing the downward tendency of earlier years. In 2009, the amount of outstanding loans of this kind increased slightly both in relation to disposable income and in value terms. The main exceptions, on the one hand, were Luxembourg, the Czech Republic and Poland, in all of which the value of other loans outstanding increased significantly (by at least 10% and in Luxembourg by 34%) and, on the other, Bulgaria, Romania, Cyprus (offsetting the growth of consumer credit) and, above all, Ireland, in all of which other loans outstanding were reduced markedly – in Ireland, by 56%.



Table 4 Other loans and credit outstanding, 2000-2009 (% household disposable income)

	2000	2002	2004	2005	2006	2007	2008	2009
BE	13.4	11.5	11.4	11.4	11.3	11.1	10.7	<i>10.6</i>
BG			2.3	2.9	3.1	3.5	<b>3.1</b>	<b>2.6</b>
CZ	3.0	1.8	2.6	3.0	3.4	4.1	4.2	5.1
DK	16.7	17.7	16.9	19.1	22.1	25.3	25.4	24.7
DE	33.4	31.5	28.2	26.9	25.7	24.6	23.6	23.2
EE	3.6	3.7	3.9	4.8	5.4	6.3	7.1	7.6
IE	2.6	2.8	3.4	4.7	6.1	6.5	5.4	2.5
EL	0.2	0.5	1.1	1.2	1.4	1.7	1.8	1.7
ES	12.8	13.5	15.4	15.7	16.7	16.8	17.2	17.5
FR	6.6	6.3	6.5	6.4	6.0	6.0	6.0	6.1
IT	15.5	13.5	13.3	13.2	13.3	13.8	13.7	14.4
CY								
LV	1.2	2.9	3.9	5.9	6.4	6.5	5.2	5.4
LT	1.1	1.2	2.0	2.9	5.5	7.7	7.0	7.4
LU								
HU	2.9	3.5	3.1	2.4	2.6	2.4	2.4	2.7
MT	5.5	8.5						
NL	10.2	8.8	8.7	7.9	9.6	8.2	7.6	7.2
AT	5.3	4.1	13.8	17.3	16.5	16.9	16.8	16.6
PL	0.2	3.0	3.6	3.5	4.1	5.0	4.2	5.5
PT	11.5	11.1	10.3	10.6	10.9	11.5	10.7	10.5
RO				0.0	0.0	0.8	<b>1.4</b>	<b>1.0</b>
SI			4.3	4.9	5.8	6.6	6.6	6.9
SK			2.5	4.2	5.0	5.4	6.2	6.5
FI	11.6	11.3	12.1	12.6	13.3	13.5	13.3	13.3
SE	0.0	30.0	32.4	33.9	36.4	35.9	32.2	38.6
UK	5.0	5.6	6.2	4.3	4.9	4.8	4.6	5.3
EU	14.9	13.8	13.4	12.9	12.8	12.5	12.2	12.6

Note: The figures in italics for 2009 involve estimation of disposable income, based primarily on the change in GDP between 2008 and 2009.

Source: European Credit Research Institute (ECRI), *Lending to households in Europe, 1995-2009* and Eurostat, National accounts

With a few exceptions, therefore, changes over recent years in the amount of credit outstanding on different types of household borrowing has been closely in line with each other. Though loans for housing constituted the main growth area up to the onset of the financial crisis in most countries, it was accompanied in general by an expansion of lending for other purposes, especially in consumer credit but also in other loans. Equally, the reduction in credit in many countries in 2008 in relation to disposable income and in 2009 in absolute terms has affected borrowing for housing purposes in particular but also for other purposes.

### The relationship between the growth of credit and household financial difficulties

Given the data available, it is difficult to examine the effect of the build-up of credit extended to households on their financial position and, in particular, on the extent of problems experienced in meeting the costs of servicing the debt concerned. The big expansion of credit, as indicated above, occurred in most countries in the early 2000s, most especially from 2002 to 2006, which happens to be a period when there are serious



gaps in the availability of household survey data at EU level, since it coincides with the transition from the European Community Household Panel (ECHP) and the EU-SILC. The former survey, therefore, came to end in 2001, while the latter did not cover all the countries which were Member States at the time until 2005 (Bulgaria and Romania were not covered by the survey until after their accession to the Union in 2007). Accordingly, there are three years, 2002-2004, for which there are no harmonised survey data available for most countries. Moreover, it is not possible to compare the change between the ECHP data for 2001 and the EU-SILC data for 2005 because of changes in the survey and in the specific questions asked, and even if it were possible, seemingly reliable ECHP data for 2001 are available only for a minority of Member States (though since for most of the countries which entered the EU in 2004, there was only a slow build-up of credit in the 1990s, the data concerned are not really relevant in this context anyway<sup>7</sup>).

Nevertheless, it is possible to examine the changes in the survey data on relevant questions over the years 1995 to 2001 for some Member States and over the years 2005 and 2008 for nearly all of them, as well as to compare the relative number of people reporting financial difficulties across countries.

### 1995-2001

The ECHP contains a number of questions designed to elicit information on whether or not the households responding have financial difficulties. One of these relates to the ease or difficulty of making ends meet, the other four relate to whether or not the household is unable to meet its mortgage, rent or loan payment schedule or to pay its utility bills<sup>8</sup>. The responses to the latter four questions have been combined for present purposes into a single indicator of those who are unable to meet at least one of the regular payments.

In the three countries in which there was the largest growth in the amount of household credit outstanding over the period 1995 to 2001, Denmark, the Netherlands and Portugal, in each of which the amount increased by around 50 percentage points relative to disposable income, there is little sign of any increase in the relative number of households with financial difficulties (Figures).

In all three, the proportion of people living in households reporting an inability to pay their housing costs or regular bills declined, in the Netherlands and Portugal, only slightly but in Denmark – the country with the highest ratio of outstanding credit to income (at 186% in 2001) – more markedly (from 5% to just over 3%). Similarly, the proportion of people reporting difficulty in making ends meet (those reporting 'great difficulty' plus those reporting 'difficulty'), a more subjective measure, fell over the period in both the Netherlands and Portugal. On the other hand, it increased appreciably in Denmark (from 7% in 1995 to 12% in 2001), though much of the increase occurred in 1996 and 2000 when the expansion in household credit was less than in other years (if only slightly so in 2000).

In the four other Member States where the relevant data are available for all the years over the period, Belgium, France, Italy and the UK, where there was much less of an expansion of outstanding credit, the proportion of people living in households experiencing financial difficulties declined according to both indicators (Figures). Nor was there was much difference in the scale of the decline between the four countries, even

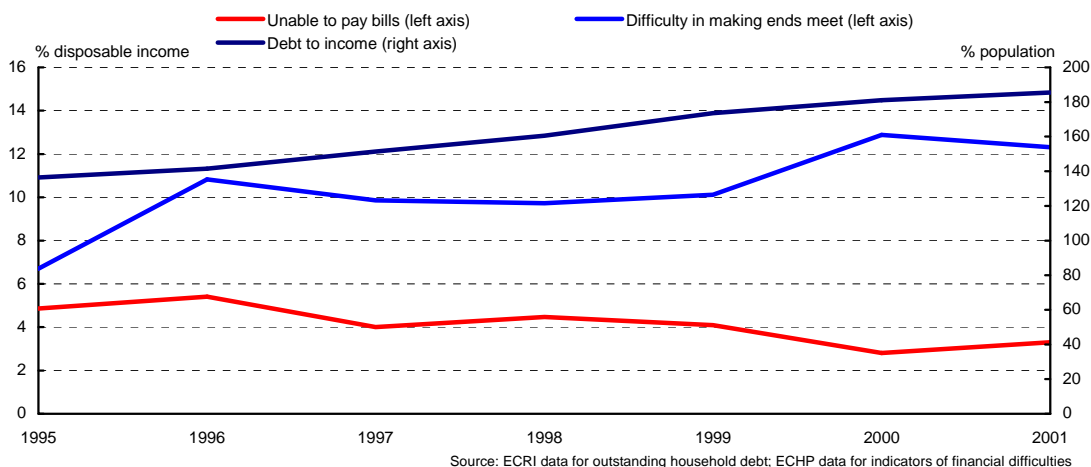
<sup>7</sup> Outstanding credit was below 15% of disposable income in 2001 for all the transition countries apart from Slovenia, where it was only around 18%.

<sup>8</sup> There is another question relating to the financial situation of households which is whether or not they normally have money left over to save after covering expenses. This is not considered here, partly because the answers are very much in line with those relating to the ability to make ends meet.

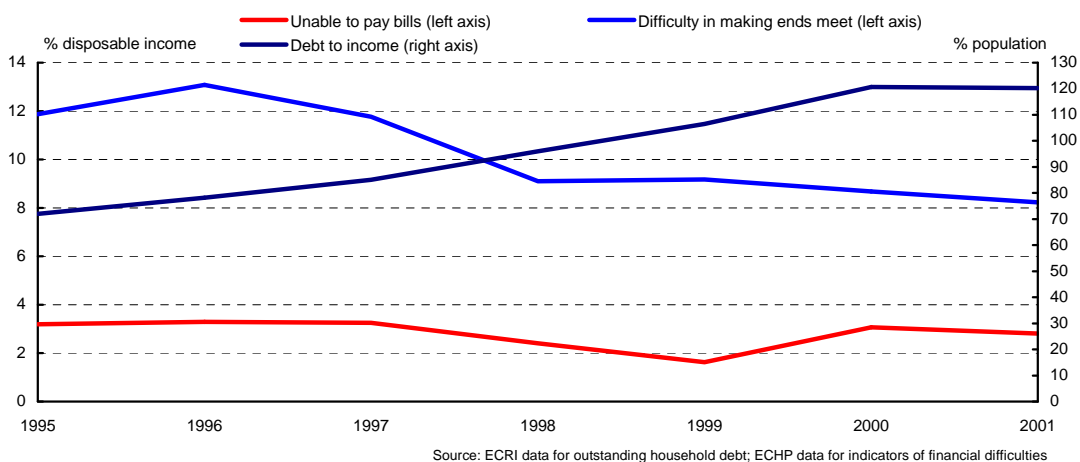


though the build-up of credit relative to disposable income varied between them (from around 3 percentage points in Belgium and France to over 12 percentage points in the UK and from under a third of disposable income in Italy to over 110% in the UK).

### Growth of household debt and indicators of financial difficulty in Denmark, 1995-2001

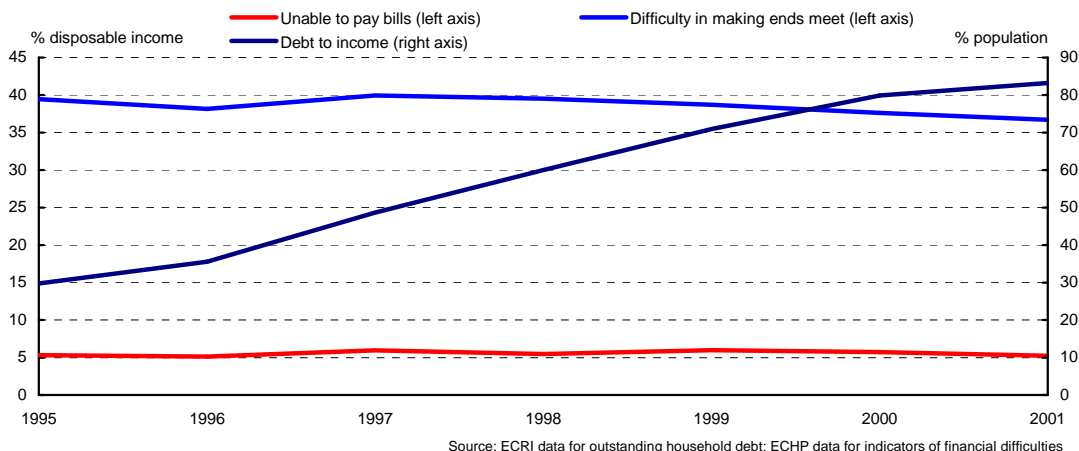


### Growth of household debt and indicators of financial difficulty in The Netherlands, 1995-2001

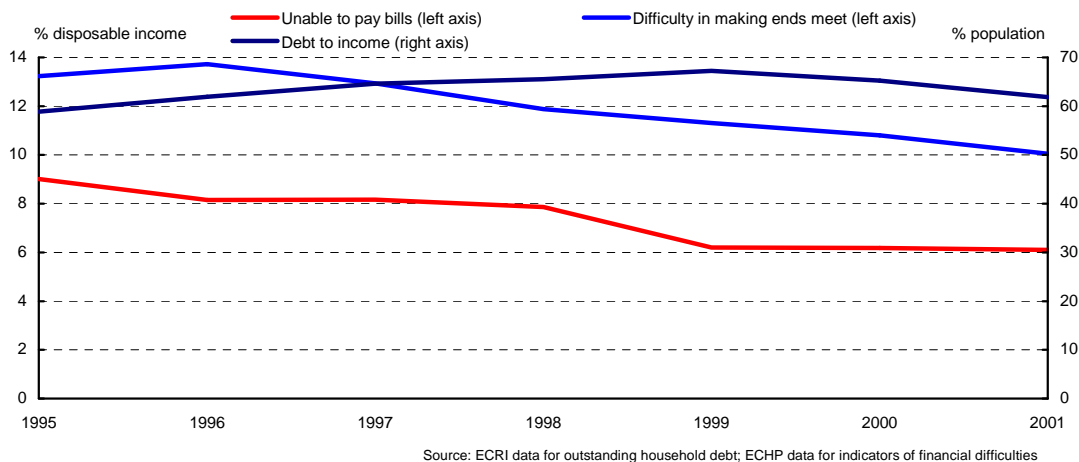




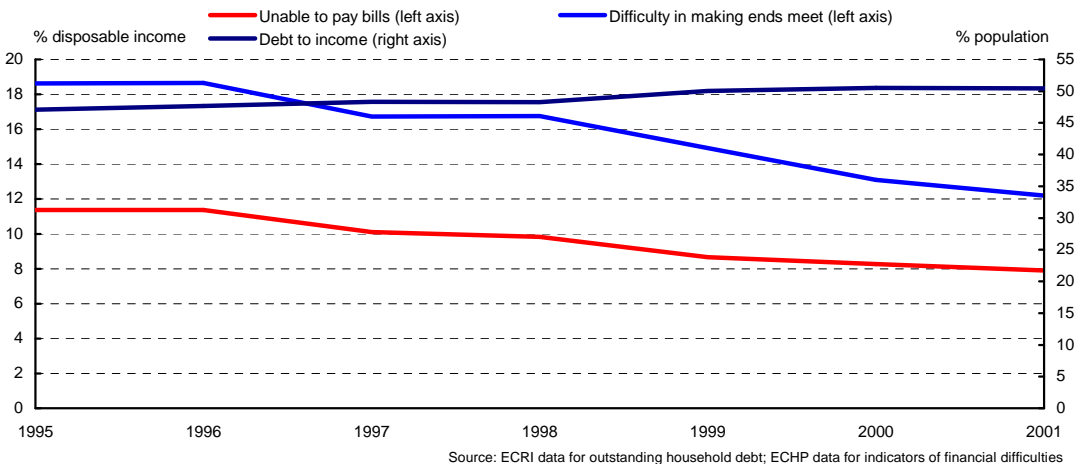
### Growth of household debt and indicators of financial difficulty in Portugal, 1995-2001



### Growth of household debt and indicators of financial difficulty in Belgium, 1995-2001



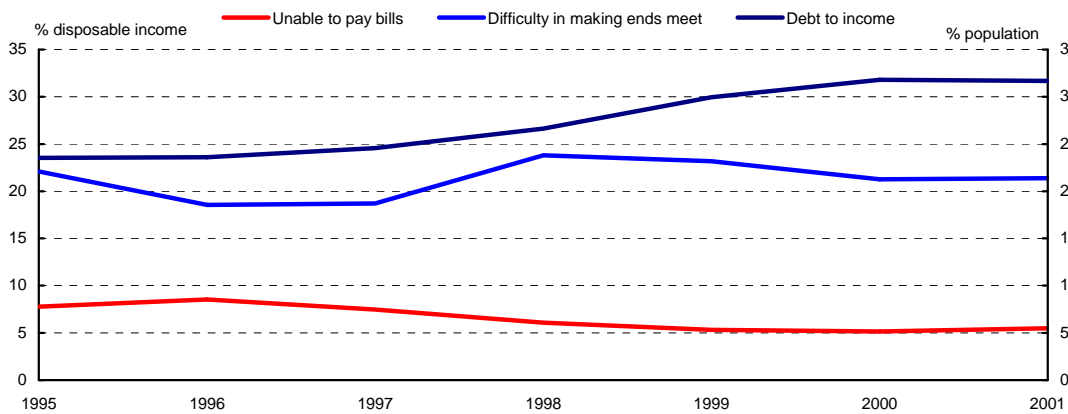
### Growth of household debt and indicators of financial difficulty in France, 1995-2001





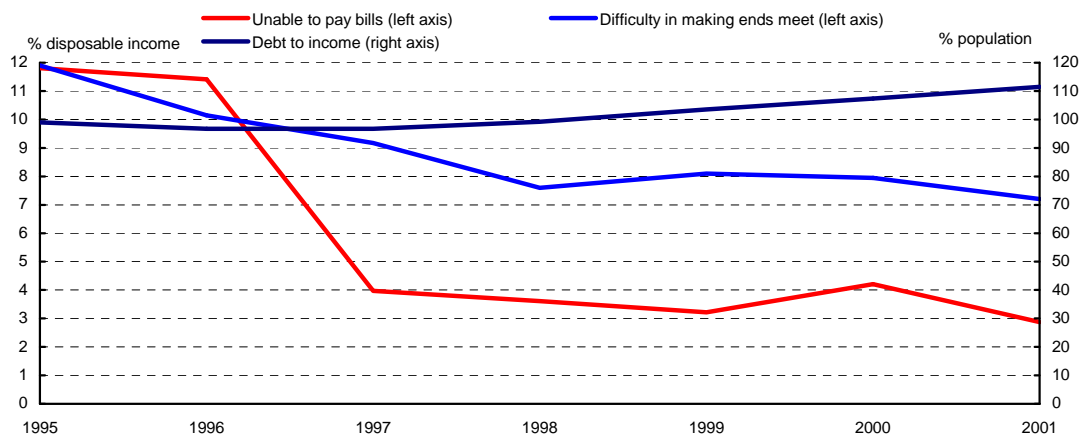


### Growth of household debt and indicators of financial difficulty in Italy, 1995-2001



Source: ECRI data for outstanding household debt; ECHP data for indicators of financial difficulties

### Growth of household debt and indicators of financial difficulty in UK, 1995-2001



Source: ECRI data for outstanding household debt; ECHP data for indicators of financial difficulties

The same is the case for the countries for which data are available only for part of the period – Austria, Finland, Spain, Ireland and Greece (there are no data for Germany, Luxembourg and Sweden). In all 5 countries, the proportion experiencing financial difficulties according to the two indicators declined over the years for which there are data. In all five as well, the amount of outstanding credit increased relative to income, if at varying rates, though again the extent of the decline in the relative number reporting financial difficulties bears little evident relationship to the change in credit outstanding. In Ireland, for example, where the build-up in credit was particularly rapid – from 49% of disposable income to 73% in the three years 1998 to 2001 – the proportion unable to pay their bills declined by almost a third (from 9% to just over 6%) over the same period and the proportion reporting difficulty in making ends meet fell by 40% (from 19% to just over 11%).

#### 2005-2008

Data are available from the EU-SILC on the financial difficulties of households for most Member States for the period 2005 to 2008. For many of them, there are not only the 'standard' data from the four surveys carried out over this period for a varying sample of individuals but also longitudinal data for a panel of respondents. The latter, in principle at



least, provide the best indicator of changes in the financial situation of households – or, indeed, in income or any other factor – since they relate to the same households in each year. This, however, is partly offset by the relatively small sample size of the panel for which data exist for all four years of the period, which is only 25% of the total number of households surveyed in each year, arising a questionmark over the representativeness of the panel concerned. To overcome this and at the same time to avoid the potential problems caused by the sample changing from year to year, it is possible to construct a linked series based on taking the same sample of people in two adjacent years (e.g. in 2008 as in 2007 and in 2007 as in 2006) and then aligning the results for the years which are the same but for which the samples surveyed differ. In this way, the sample size is increased by three times to 75% of the standard annual sample<sup>9</sup>.

In a few countries, however (Germany, Denmark, Greece and France, in particular), there are no reliable longitudinal data available and for these the standard data are used instead. (Examination of the countries for which both sets of data exist indicates that the year-to-year changes shown by the standard data are in most cases reasonably similar to those shown by the longitudinal data, so that the use of the former for the countries for which the latter data are missing is unlikely to affect the results significantly.)

The indicators used to identify households in financial difficulties are similar to those used for the earlier period – those reporting having difficulty or great difficulty in making ends meet and those in arrears in payments of rent or mortgage interest, utility bills or loan charges. The first is the same as for the earlier period while the second is slightly different in that it relates to actually being in arrears rather than an inability to meet the payments.

There was a decline for most countries over the 4-year period in the proportion of households – or more precisely in the proportion of population living in households – that were in arrears in at least one of the kinds of payment listed above. There was also a decline in many countries in the relative number of people living in households reporting difficulty in making ends, though this was less widespread. These declines coincided with a general increase in the amount of household credit outstanding, as indicated above.

Nevertheless, a slightly different picture emerges if the period is divided into two – the years 2005 to 2007 when credit outstanding expanded in relation to disposable income in virtually all countries, and in many of them markedly, and 2007 to 2008, when the increase in credit in most countries either came to an end or slowed down or went into reverse. The latter, of course, is also the period when the financial crisis began to be felt and when economic activity began to turn down, though the effect on individual countries, and more especially the timing of this, differed widely, as indicated above. Indeed, in many, there is little sign in the statistics for 2008 of any significant slowdown in growth either in the economy or in outstanding credit. This came later in 2009 when the repercussions of the effects of the crisis in other countries began to be felt.

Examining, first, the run-up to the financial crisis, Member States can be divided into a number of groups according to the rate at which the credit extended to households expanded. The first group consists of the countries in which credit outstanding increased by around 40 percentage points or more in relation to disposable income over the three years 2004-2007 – Denmark, Estonia, Ireland, Spain and Latvia – which to a large extent were also the Member States in which the financial crisis hit earliest and hardest. (The group includes 4 of the 6 Member States in which GDP fell in 2008, Spain being the

<sup>9</sup> The EU-SILC sampling method is to survey 75% of the households selected for two consecutive years, 50% for 3 consecutive years and 25% for four years.



exception and the others being Sweden and the UK, though the fall was marginal in the latter, and both these countries are included in the second group in terms of credit expansion.) In 4 of these 5 countries, the proportion of people in arrears in payment of housing costs, utility bills or loan charges declined over the period 2005-2007, most notably in Estonia and Latvia, in each of which the proportion halved (to 5% in the former and to 10% in the latter) (Table 5). In Denmark, where the expansion in credit relative to disposable income over the period 2004-2007 was more than anywhere else in the EU (by over 60 percentage points), the decline in the proportion in arrears was more than the average (by over 2 percentage points to under 5%)<sup>10</sup>.

The exception is Spain, where credit outstanding expanded by just under 40% of disposable income and where the proportion in arrears increased over the 3-year period (by around 2 percentage points to just over 7%).

The proportion of people reporting difficulty in making ends meet follows a similar pattern. In Spain, the proportion increased over the period, even if only marginally, while in the other four countries, it declined though by much less than for arrears. In Denmark, the decline was under 0.5 of a percentage point in relation to disposable income, in Estonia, only around 1 percentage point, and in Ireland, less than 2 percentage points. By far the biggest decline was in Latvia, by around 10 percentage points relative to income, but the proportion reporting difficulty was still over 40% in 2007.

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<sup>10</sup> Denmark, as noted above, is one of the countries for which there are no reliable longitudinal data and where the standard data have been used instead.



Table 5 Household credit outstanding and indicators of financial difficulties, 2005-2007

	Credit outstanding (% disp. Income)		%-point change	Arrears in payments on at least one item (%)		%-point change	Difficulty in making ends meet (%)		%-point change
	2004	2007	2004-07	2005	2007	2005-07	2005	2007	2005-07
DK	210.1	272.7	62.5	6.7	4.5	-2.2	6.8	6.5	-0.3
LV	29.0	77.7	48.7	29.5	10.1	-19.4	51.1	41.0	-10.2
EE	36.6	81.9	45.3	13.1	5.0	-8.1	11.0	11.3	0.3
IE	119.0	159.5	40.6	5.2	7.5	2.3	24.5	21.7	-2.8
ES	87.7	124.6	36.9	5.1	7.1	2.0	25.2	28.0	2.8
LT	12.2	41.9	29.7	23.7	8.9	-14.8	27.9	24.3	-3.7
PT	88.6	113.0	24.4	8.0	6.6	-1.4	36.2	37.2	1.1
NL	164.2	188.3	24.1	6.4	3.8	-2.6	17.4	8.8	-8.5
EL	39.9	62.4	22.5	33.0	26.4	-6.7	50.6	52.4	1.8
UK	144.0	166.4	22.4	6.3	7.9	1.6	13.3	13.1	-0.2
SE	105.4	127.4	22.0	10.8	5.7	-5.1	9.6	7.5	-2.0
FI	69.6	88.6	19.0	9.5	8.5	-1.0	6.6	6.6	0.0
CZ	21.2	39.0	17.8	12.4	5.4	-7.0	30.0	26.8	-3.2
PL	17.1	33.7	16.6	28.8	18.1	-10.7	50.2	39.5	-10.7
HU	24.1	40.3	16.2	18.8	19.8	1.0	36.2	41.2	5.0
SI	19.4	31.9	12.4	12.7	13.9	1.1	29.7	20.8	-8.9
SK	16.0	27.9	11.9	12.5	7.7	-4.9	30.4	29.9	-0.5
BE	69.4	81.2	11.8	8.5	6.4	-2.1	17.2	15.5	-1.7
FR	57.2	68.8	11.6	10.6	9.3	-1.3	16.2	15.5	-0.7
IT	38.8	48.1	9.3	13.2	12.6	-0.6	34.0	36.5	2.5
AT	61.8	68.2	6.4	2.6	4.0	1.3	8.5	10.6	2.1
DE	93.3	86.9	-6.4	5.6	5.8	0.2	11.6	6.0	-5.5

Source: ECRI, Lending to households in Europe and EU-SILC longitudinal data

The countries in the second group are those in which credit outstanding expanded by over 20% but by less than 30% between 2004 and 2007. These comprise Lithuania (just under 30%), Greece, the Netherlands, Portugal, Sweden and the UK. For these countries, all but the UK show a reduction over the period in the proportion in arrears on payments. This was particularly large in Lithuania (down from 24% to 9%) where the growth in credit was the highest of this group, while in Greece, despite a significant decline, the proportion in arrears was larger than anywhere else in the EU, apart from Bulgaria and Romania (not included in the analysis here). On the other hand, as for the first group, the proportion reporting difficulty in making ends meet in general shows less of a change. Indeed, in two of the countries, Greece and Portugal, where the proportion in arrears declined, the proportion with difficulty making ends meet increased over the period, while in the UK, it remained much the same. The two indicators of financial difficulty, therefore, show a somewhat different picture.

The third group consists of 4 countries, Finland, the Czech Republic, Poland and Hungary, which showed an increase in credit outstanding of between 15 and 20 percentage points over the period. In three of these, the proportion in arrears on payments declined, only slightly in Finland but more markedly in the Czech Republic and Poland, while in the fourth, Hungary, it increased by 1 percentage point. There is a closer link in this group between the two indicators, the proportion with difficulty of making ends meet increasing



significantly in Hungary over the period (by 5 percentage points) and declining in the Czech Republic and Poland, while in Finland, it remained unchanged.

In the fourth group of 4 countries, Slovenia, Slovakia, Belgium and France, the proportion in arrears again declined in three cases, especially in Slovakia, but increased slightly in Slovenia (by 1 percentage point). The proportion reporting difficulty in making ends meet also declined in the latter three cases, though only slightly in Slovakia (by under 1 percentage point), but in contrast to the proportion with arrears, it also declined in Slovenia and by much more than in the other countries (by 9 percentage points).

In the final group of three countries, where credit outstanding increased by less than 10 percentage points in relation to income, or declined in the case of Germany, the proportion of people in arrears in their payments increased in Austria and Germany – if only marginally in the latter – and fell in Italy, though only slightly. The proportion reporting difficulty making ends meet shows a somewhat different pattern, increasing in Austria, where the proportion in arrears also rose, but also in Italy, where it fell, and declining markedly in Germany, where the proportion in arrears increased.

From the above, it is evident that there is no simple relationship between the growth of household credit in relation to income and the relative number of households experiencing financial difficulties. This perhaps is not too surprising since, as indicated above, an expansion in the availability of credit should make it easier for households to manage fluctuations in income and avoid these leading to financial problems, even if at the same time it adds to the charges which households have to meet out of their income. Equally, the relationship is likely to be affected by whether disposable income is growing or declining and, if the former, the rate at which this is occurring. In particular, a key question is whether income is rising by enough to cover the increased cost of servicing debt or not, and if not, the extent to which it is lagging behind, as well as, of course, the degree to which the rise in income is evenly distributed across households.

The experience in 2008 when the amount of credit extended to households – and taken up by them – either declined or increased by less than in earlier years over most of the EU provides a further insight into the relationship in question. Again, Member States can be divided into groups according to the change in credit outstanding in relation to disposable income between 2007 and 2008. In 8 Member States, 5 of which entered the EU in 2004 or 2007, the amount outstanding expanded by around 5 percentage points or more relative to income between the two years, in Poland and Hungary, by around 11-12 percentage points. In 7 of the 8 countries, the proportion of people living in households with arrears on payments declined, increasing only in Bulgaria, the decline being largest in Poland and Hungary, the countries with the highest growth in credit (Table 6).

The proportion reporting difficulty in making ends meet, however, shows a different picture, increasing in all of the countries, except Poland and Bulgaria, where it fell – though in the latter, it was still the case that around two-thirds of people in 2008 reported such a difficulty. Despite fewer households being behind on their payment of housing, utility or loan charges, therefore, more of them in most of these countries had difficulty in making ends meet.

In the second group of group of 8 countries, half of which entered the EU in 2004 or 2007, the increase in credit ranged from around 1 percentage point relative to disposable income to just over 3 percentage points. In this case, only three of the countries showed a reduction in the proportion of people in arrears on payments and in the case of one of them, Sweden, only a marginal decline. (The large scale of the reduction for Romania



raises a question-mark over the consistency of the data between the two years.) Only Romania of the three countries showing a decline in the proportion in arrears showed a fall in the proportion reporting difficulty in making ends meet. In Sweden, there was little change and in Lithuania a rise. Of the other 5 countries, only Estonia showed a fall in this proportion and then only small, while in Finland, there was no change. In the other three countries, the proportion increased significantly, especially in Belgium and Slovenia.

**Table 6 Household credit outstanding and indicators of financial difficulties, 2007-2008**

	Credit outstanding (% disp. Income)		%-point change	Arrears in payments on at least one item (%)		%-point change	Difficulty in making ends meet (%)		%-point change
	2007	2008	2007-08	2007	2008	2007-08	2007	2008	2007-08
PL	33.7	45.4	11.7	18.1	11.3	-6.9	39.5	36.6	-2.8
HU	40.3	51.2	10.8	19.8	16.0	-3.8	41.2	43.7	2.5
EL	62.4	68.4	6.1	26.4	24.5	-1.9	52.4	54.6	2.1
NL	188.3	194.2	5.9	3.8	3.5	-0.3	8.8	10.4	1.6
DK	272.7	277.5	4.8	4.5	3.9	-0.5	6.5	8.0	1.4
SK	27.9	32.7	4.8	7.7	5.0	-2.7	29.9	34.9	4.9
BG	46.1	50.8	4.7	30.5	33.7	3.2	67.0	65.3	-1.6
CZ	39.0	43.6	4.7	5.4	3.9	-1.5	26.8	29.0	2.2
SE	127.4	130.8	3.4	5.7	5.4	-0.3	7.5	7.5	-0.1
RO	26.5	29.1	2.6	85.6	26.6	-59.0	50.7	48.6	-2.1
EE	81.9	84.5	2.5	5.0	7.6	2.6	11.3	10.8	-0.5
BE	81.2	83.5	2.3	6.4	6.4	0.0	15.5	21.3	5.8
SI	31.9	33.6	1.7	13.9	16.5	2.6	20.8	24.9	4.1
FI	88.6	90.3	1.7	8.5	9.4	0.9	6.6	6.6	0.0
LT	41.9	42.8	0.9	8.9	7.5	-1.4	24.3	27.3	3.0
AT	68.2	68.9	0.8	4.0	6.6	2.6	10.6	13.9	3.4
IT	48.1	47.7	-0.4	12.6	14.9	2.3	36.5	37.9	1.4
PT	113.0	112.3	-0.7	6.6	5.0	-1.6	37.2	45.3	8.1
UK	166.4	165.1	-1.2	7.9	7.1	-0.9	13.1	16.2	3.1
ES	124.6	123.1	-1.5	7.1	6.8	-0.3	28.0	30.1	2.1
DE	86.9	84.1	-2.8	5.8	5.7	-0.1	6.0	6.8	0.7
LV	77.7	68.6	-9.1	10.1	13.3	3.2	41.0	35.5	-5.4
IE	159.5	141.8	-17.7	7.5	11.6	4.2	21.7	23.6	1.9

Source: ECRI, Lending to households in Europe and EU-SILC longitudinal data

In the third group, the 7 remaining countries for which the relevant data are available, the amount of household credit outstanding declined in relation to income, most notably in Latvia and Ireland (by almost 18 percentage points relative to income in the last). In both of the latter countries, the proportion of people in arrears on payments increased markedly, by more than anywhere else in the EU. The proportion also increased in Italy, but in the other four countries, it either remained much the same (in Spain and Germany) or it declined (in Portugal and the UK). In all four of these countries, however, the proportion of people reporting difficulty in making ends meet increased in 2008. The increase, moreover, was particularly pronounced in Portugal (at 8 percentage points), the country showing the largest decline in the proportion in arrears in their payments. The increased difficulty in making ends meet, therefore, was not accompanied by more households being behind in paying housing costs and other charges.

Two of the three countries in which there was an increase in the proportion in arrears, Italy and Ireland, also showed a rise in the relative number of households finding it difficult to



make ends meet. In the other country, Latvia, however, the proportion declined by over 5 percentage points, which is hard to reconcile with the significant increase in the proportion in arrears.

These differences in experience across countries confirm the point made above, that there is no simple relationship between the amount of credit outstanding and the financial difficulties of households. Nevertheless, signs of the beginning of the recession are evident in many countries, if not so much in the relative number of households falling behind with their payments of essential charges, but in the proportion reporting difficulty in making ends meet. Whereas there were only 6 countries in which this proportion increased between 2005 and 2007 by more than 1 percentage point – most notably in Hungary, Italy, Greece and Portugal, countries in which there were growing economic problems over the period – in 2008, there were 15 out of the 23 for which data are available in which this was the case. These include the 6 in which the proportion increased over the preceding years, which are not necessarily the ones in which credit expanded by most or by least, but they did experience a significant slowdown in the growth of real income in most cases over the period, or in the case of Italy and Portugal, a depressed rate of growth throughout the period.

Although, therefore, the growth of credit and the associated increase in the cost of servicing loans, on the one hand, or a cutback in credit, on the other, might both give rise to greater financial difficulties for households, any such effects are liable to be swamped by the effect of real income growth increasing or diminishing, though this itself might reflect what is happening to credit.

More recent evidence from the countries which seem to have been hit hardest by the financial crisis provides a insight into its effect on households (see Box).

### Consequences of the crisis in selected countries

#### Lithuania

According to a Bank of Lithuania survey carried in 2009, around 30% of disposable income, on average, was used for debt servicing by those households which had outstanding debt. This was much the same as in 2008, despite a reduction in interest rates over the year, reflecting in part the decline in income which occurred at the same time. Most of the debt concerned was for house purchase, the servicing costs amounting to an average of 27% of household income, though for the lowest income group, it absorbed 43% of income<sup>11</sup>.

In 2009, almost 16% of households with housing loans were in arrears in payments, as against 7% in 2007 and just 4% in 2006 (see Table). Moreover, their deteriorating financial situation meant that a substantial proportion of households with housing loans were unable to save (73% in 2009 as against 53% in 2006) and 14% had no financial assets at all. The latter group are regarded as those most at risk of suffering financial problems and becoming over-indebted.

#### Estonia

The increase in loans for house purchase, which was particularly rapid between 2005 and 2007, was accompanied by a steep increase in prices. By Autumn 2009, however, in the wake of the financial crisis, the median house price had fallen back to its 2004 level, leaving many indebted households with 'negative equity', in the sense that the value of their house is less than their outstanding debt.

The tightening of lending conditions coupled with the increase in unemployment and reduction in new job creation led to a decline in new borrowing and between end-2008 and end-2009, new loans to households fell by 42%. Although according to the financial statistics, households with

<sup>11</sup> *Financial Stability Review 2009* – Bank of Lithuania, Vilnius, 2009.



outstanding debt remain better off than the average<sup>12</sup>, the income of those with mortgages declined by over 20% in 2009. At the same time, the share of household income going to the monthly servicing of loans has increased. In 2008, 16% of households with mortgages spent over 40% of their income on loan repayment and interest; in 2009, it was 26%. As a result, 34% of households with mortgages were unable to put any income aside for savings in 2009 and over 14% of outstanding loans were subject to special observation because of the risk of default.

In August 2009, however, banks adopted a policy of more actively trying to help customers with payment difficulties by restructuring their loans and granting periods of grace. This has led to the amount loans overdue stabilising. Moreover, a new Debt Restructuring and Debt Protection Act is due to come into force in January 2011 to make it easier for households in financial difficulties to restructure their debt and avoid personal bankruptcy<sup>13</sup>

### Spain

On average, around 17% of the gross income of households in Spain went to the servicing of debt in 2007, though the figure was as much as 38% for the poorest households. Almost 12% households with outstanding debt spent more than 40% of their income on servicing this and the figure was even higher for those with low income.

Immigrant groups have been hit especially hard by the crisis, since they have been responsible in recent years for almost 40% of house purchases involving large mortgages. According to the Spanish Mortgage Association, the current situation is liable to create a dichotomy in the country between households experiencing of unemployment or at risk of this, which can neither borrow or repay mortgages and those where the members remain in good jobs which benefit from low interest rates and house prices<sup>14</sup>.

In 2009, a provisional and partial moratorium on mortgage payments<sup>15</sup> was introduced to protect households from repossession and to help them avoid becoming over-indebted, though by the end of 2009, only around 10,000 households had been assisted by this.

### UK

The number of mortgage repossessions rose sharply as the economic downturn took effect, from 25,900 in 2007 to 47,700 in 2009. In 2010, however, the number has fallen as a result of the action taken by government and the banks to help borrowers through loan restructuring or allowing them to postpone repayment. In the second quarter of 2010, therefore, there were 9,400 repossessions as opposed to 11,800 in the same period of 2009<sup>16</sup>.

The number of individual insolvencies, however, has risen continuously (by 41% between early 2008 and early 2010). Nevertheless, the number of bankruptcies has fallen as other arrangements have been expanded in their place. In the second quarter of 2010, there were just under 15,000 bankruptcies, down by 21% on the corresponding quarter in 2009, but around 13,500 individual voluntary arrangements, up by 10% on 2009, and 6,300 debt relief orders.

The total debt written off in the first half of 2008 amounted to £3.3 billion<sup>17</sup>. In the second quarter of 2010 alone, total write-offs of loans to individuals reached almost £3.5 billion, over twice the quarterly

<sup>12</sup> In 2009, 44% of households with a loan had a monthly income of over EUR 320 per head as against 34% of all households

<sup>13</sup> *Financial Stability Review 1/2010* – Bank of Estonia, 2010.

<sup>14</sup> <http://www.ahe.es/bocms/images/bfilecontent/2006/04/26/90.pdf?version=17>

<sup>15</sup> Mortgage holders are able to postpone 50% of payments for 2 years and extend the mortgage period at no cost.

<sup>16</sup> Council of Mortgage Lenders: <http://www.cml.org.uk/cml/media/press>

<sup>17</sup> Department for Business, Enterprise and Regulatory Reform (2009) *Household Debt Monitoring Paper-H1 2008*, February.





figure in the first half of 2008, implying a write-off of some £40 million every day<sup>18</sup>. Over 60% of write-offs were on credit card debt

At the end of 2009, 1.7% of mortgages were in arrears of more than 2.5% of the balance outstanding. While this figure is forecast to decline to 1.5% at the end of 2010<sup>19</sup>, it is also forecast that there will no decline in the number of mortgages which are in arrears of 10% or more of the balance outstanding and which has remained much the same over recent months. This suggests that there may be a significant number of borrowers whose arrears have been stabilised through lender forbearance or other support arrangements, but whose financial situation remains weak and who accordingly at risk of repossession if, for example, interest rates increase or social benefits are cut.

### Ireland

Arrears on mortgages have risen sharply since the onset of the financial crisis and at end-June 2010, some 4.5% of mortgages outstanding were in arrears of over 3 months, up by around 13% on the figure in March 2010, and 3% of mortgages in arrears of over 6 months. Although relatively few properties have been repossessed (387 over the 12 months from July 2009 to end-June 2010, though many more were surrendered voluntarily), some 5,460 formal demands for payment had been issued by lenders in respect of mortgages in arrears (equivalent to 22% of those in arrears of more than 6 months) and court proceedings had been initiated in respect of just over 3,000 of those in arrears (12% of those in arrears of over 6 months).

At the same time, homelessness has increased. For example, the Capuchin Day Centre for Homeless People in Dublin reported a 285% increase in the distribution of basic food from November 2008 to the beginning of 2010, to the highest level in 40-year history of the centre.<sup>20</sup>

## The characteristics of those with large outstanding debts

As indicated at the outset, the EU-SILC ad hoc module for 2008, which was focused on the twin issues of over-indebtedness and financial exclusion, enables an insight to be gained of both the characteristics of the households with large debts outstanding which they have difficulty in managing and the underlying causes of this. In particular, the data collected by the module enable the above analysis to be taken a step further by giving an indication of the relative importance of economic factors, which tend to show up in the form of low levels of income, as a cause of over-indebtedness as well as of the types of households affected. As such, the module provides a means of confirming or otherwise the findings of previous research studies into over-indebtedness. These include, in particular:

- a greater likelihood of households with low income to be over-indebted than those with higher levels<sup>21</sup>;
- a tendency for the relative number of people who are over-indebted to decline with age<sup>22</sup>;
- households to be more at risk of being over-indebted if there are children<sup>23</sup>;

<sup>18</sup><http://www.bloomberg.com/news/2010-09-01/u-k-credit-card-debt-write-offs-reach-record-3-2-billion-times-reports.html>

<sup>19</sup> Council of Mortgage Lenders: <http://www.cml.org.uk/cml/media/press>

<sup>20</sup> Central Bank and Financial Services Authority of Ireland (2010) Debt Part 2: Personal debt and consequences. *Spotlight* n°3 2010.

<sup>21</sup> See, for example, Berthoud and Kempson, 1992; Bridges and Disney, 2004; Herbert and Kempson, 1995; Poppe, 1999; Webley and Nyhus, 2001, Stamp, 2006 and Springeneer, 2005.

<sup>22</sup> See, for example, Atkinson et al., 2006; Berthoud and Kempson, 1992; Bridges and Disney, 2004; Kempson et al., 2004; Webley and Nyhus, 2001; Betti et al., 2007



- lone parents to be particularly liable to be over-indebted<sup>24</sup>;
- those who are separated or divorced to have a higher probability of being over-indebted than other people<sup>25</sup>;
- people living in rented accommodation to be more prone to over-indebtedness than owner-occupiers<sup>26</sup>;
- unemployment to have an uncertain independent effect on the probability of being over-indebted (i.e. independently of the effect of a low level of income), some studies finding a clear link others not<sup>27</sup>;
- a tendency for over-indebtedness to result from a sudden drop in income<sup>28</sup>.

These potential influences are considered in turn below on the basis of the data collected by the module, which allows them to be examined over most of the EU Member States whereas previous studies have typically been confined to a single country. First, however, before focusing on households with large outstanding debts from whatever source, it is instructive to examine the form which the counterpart credit takes. It should be emphasised that since the module is concerned with over-indebtedness, outstanding credit is linked directly with loans which arise because of financial difficulties. Indeed, the module attempts to identify over-indebtedness by reference to such difficulties and to the problems which households have in meeting their debt servicing commitments (see Box).

#### Definition of over-indebtedness in the EU-SILC

The module included as part of the EU-SILC survey in 2008 was designed as an attempt to identify households which are over-indebted by collecting data on the different forms of credit which they have outstanding, the extent to which they are in arrears in meeting the servicing costs of these and whether or not the arrears in questions are due to the financial difficulties of meeting these costs. Although this was the aim of the module, however, differences between countries in the form in which the questions were asked in practice result in serious difficulties in comparing the results between them, as is explained below. The forms of debt distinguished in the module arise from:

- being overdrawn on a bank account *due to financial difficulties*, with interest being charged on the amount concerned but with no fixed schedule of payments;
- having an un-cleared balance on a credit or store card at the end of the month for at least the last 3 months *specifically because of financial difficulties rather than because of using the credit as a means of smoothing expenditure in relation to income*;
- being in arrears in meeting the payment due on credit or loans for non-housing purposes *for financial reasons*;
- being in arrears in paying the costs of servicing housing loans or utility and other bills relating to housing;
- being in arrears in paying other, non-housing related bills.

<sup>23</sup> See, for example, Berthoud and Kempson, 1992; Carpentier and Van den Bosch, 2008; Frade et al., 2005; Kempson, 2002; Rivière, 2006; Observatoire du crédit et de l'endettement, 2005; Springeneer et al., 2007

<sup>24</sup> See, for example, Observatoire du crédit et de l'endettement, 2005; Springeneer et al., 2007; Frade et al., 2005; Kempson, 2002.

<sup>25</sup> See, for example, Berthoud and Kempson, 1992; Kempson, 2002; Kempson et al., 2004

<sup>26</sup> See, for example, Berthoud and Kempson, 1992; Kempson, 2002; Kempson et al., 2004; Observatoire du crédit et de l'endettement, 2005; Balmer et al., 2006.

<sup>27</sup> See, for example, Kempson and Atkinson, 2006; Kempson et al., 2004; Gloukoviezoff, 2006; Koljonen and Romer-Paakkanen, 2000.

<sup>28</sup> See, for example, Del Rio and Young, 2005; Herbert and Kempson, 1995; Kempson, 2002.



Accordingly, an attempt was made in the design of the module to distinguish debts which are a reflection of problems of covering expenditure from household income and which households might have problems in managing from credit outstanding *per se*, which to large extent tends to take the form of mortgage for buying houses.

In each case, data are collected on the amount of credit outstanding – or the extent to which the household is in arrears in meeting the payment schedule on its loans. These data for the most part take the form of the amount involved expressed in relation to monthly disposable income, specifically grouped relatively broadly into 4 divisions: less than 10% of the monthly disposable income of the household, 10% to 33% of income, 33% to 100% and over 100%. This, in practice, restricts the analysis which can be carried out, in particular, as regards the amount of outstanding credit which can be considered to represent over-indebtedness, which cannot easily be increased above 100% of monthly disposable income.

Given the way that the credit outstanding is defined, however, even households falling into the lowest division could be considered as being over-indebted. Nevertheless, although this might be the case, debt that amounts to only a small proportion of income ought not to pose serious long-term problems for the households concerned. The focus in the text, therefore, is on households whose aggregate debts amounts to over 100% of monthly disposable income. While households in this position may not necessarily be over-indebted according to all aspects of the definition put forward in the study for the European Commission referred to earlier – in particular, it cannot be discerned from the data collected whether the debt situation represents a long-term rather than a temporary state of affairs or, to the extent that it is the latter, how far they have continuing access to borrowing to avoid reducing their expenditure substantially – it is evident that they have significant problems in managing their debt. It is, therefore, reasonable to assume that their characteristics and the factors associated with their situation are indicative at least of households which are over-indebted according to the set of criteria listed above.

At the same time, the relative numbers of households defined as being over-indebted here may not necessarily reflect the actual numbers in the different Member States, if only because of differences in access to continuing credit and in norms as regards indebtedness which, in turn, reflect differences in the financial system in place.

The difficulties of making inter-country comparisons are compounded by the fact that not all Member States chose to follow the suggested form of the questions in conducting the survey. In particular, in many cases, they ignored the fact that the module was intended to be about *over-indebtedness* and not simply about outstanding debts and, accordingly, failed to specify that the outstanding debts to be recorded in the case of having an overdrawn bank account or an uncleared balance on a credit card should only be those which arise *because of financial difficulties*. In the case of the questions on bank accounts and credit card balances, therefore, the qualifying phrase in italics above was not included in a number of national questionnaires. This was case, for example, in Germany, Austria and the UK, in all of which the proportion of households with debts of over 100% of monthly disposable income was higher than in other countries. In these countries and others, therefore, the instruction given in the guidance on the module by Eurostat that: '*It is important to try to filter as far as possible the use of the credit card balance as a way to smooth out consumption expenditure if the household has not financial difficulties*'<sup>29</sup> was not taken into account, making differences between countries in the reported extent of indebtedness hard to interpret.

### Forms of credit giving rise to indebtedness

The replies to the EU-SILC module suggest that overdrawn bank accounts are the most common form of credit for households which get into financial difficulties. Across the EU as

<sup>29</sup> From the *Description of target variables* for the EU-SILC 2008 survey, published by Eurostat together with the EU-SILC User Database.



a whole, 11% of people in 2008 lived in households which were overdrawn on at least one account because of such difficulties (Table 7).

Table 7 Proportion of people in households with bank overdrafts, outstanding balances on credit cards or in arrears on other loans (% of total)

	Overdrawn bank account			Credit or store card			Other loan/credit payments		
	Total	Over 33%	Over 100%	Total	Over 33%	Over 100%	Total	Over 33%	Over 100%
Belgium	10.5	3.1	0.8	10.1	0.9	0.3	1.2	0.1	0.0
Bulgaria	0.4	0.2	0.1	1.2	0.7	0.2	2.4	1.3	0.5
Czech Republic	15.3	6.2	1.3	1.4	0.6	0.1	0.5	0.2	0.2
Denmark	5.0	2.3	1.2	0.5	0.1	0.0	1.5	0.7	0.3
Germany	25.7	15.6	7.7	5.6	2.4	1.0	0.5	0.3	0.2
Estonia	1.2	0.6	0.2	0.8	0.5	0.1	0.4	0.2	0.1
Ireland	5.9	2.5	1.3	11.2	5.5	2.1	2.2	0.8	0.4
Greece	1.4	1.0	0.7	15.7	5.0	2.5	12.0	3.3	1.1
Spain	4.6	0.9	0.3	2.3	0.7	0.2	1.9	0.5	0.1
France	13.9	4.4	0.6	1.5	0.8	0.4	0.9	0.6	0.3
Italy	4.6	3.5	2.0	0.3	0.1	0.1	0.7	0.6	0.5
Cyprus	15.4	12.4	2.9	11.2	6.8	1.0	4.6	2.4	1.0
Latvia	14.5	2.6	0.6	1.0	0.3	0.1	1.6	0.6	0.1
Lithuania	0.5			0.6	0.1	0.0	2.6	0.2	0.0
Luxembourg	3.9	1.0	0.3	1.2	0.3	0.1	0.9	0.2	0.1
Hungary	5.1	3.5	1.2	1.2	0.6	0.3	5.0	0.5	0.2
Malta	3.0	1.0	0.2	5.2	1.3	0.2	0.2	0.1	0.1
Netherlands	9.1	3.9	1.0	1.0	0.5	0.2	0.4	0.2	0.1
Austria	17.8	11.9	5.3	0.4	0.4	0.2	1.2	1.1	0.8
Poland	4.3	0.1	0.0	1.1			1.2		
Portugal	4.6	1.3	0.5	1.2	0.2	0.1	1.5	0.3	0.1
Romania	2.3	1.2	0.4	0.8	0.2	0.1	0.5	0.2	0.1
Slovenia	27.7	10.1	3.4	1.3	0.3	0.0	0.8	0.2	0.0
Slovakia	11.3	5.0	1.1	0.7	0.2	0.1	1.3	0.3	0.1
Finland	0.0			0.6	0.0	0.0	1.8	0.5	0.3
Sweden	0.8	0.2	0.1	0.9	0.3	0.2	0.7	0.4	0.4
UK	14.0	6.7	2.1	21.6	14.8	8.6	7.0	0.4	0.3
EU	11.0	5.3	2.2	4.9	2.6	1.4	2.1	0.5	0.3

Note: 'Total' refers to all in the category. 'Over 30%' and 'Over 100%' refer to the amounts relative to annual income  
Source: EU-SILC 2008

In Germany and Slovenia, the proportion exceeded a quarter and in 6 other countries, Austria, Cyprus, the Czech Republic, Latvia, the UK and France, it was 14% or more. On the other hand, in 15 of the 27 countries, the proportion was only around 5% or less and in 6 (Bulgaria, Estonia, Greece, Lithuania, Romania, Finland and Sweden), under 2%.

Only just over 5% of people across the EU had overdrawn amounts exceeding a third of monthly disposable income, though over 10% in Germany, Cyprus, Austria and Slovenia, and just over 2% were overdrawn by over 100% of monthly income - over 5% in Austria and almost 8% in Germany (but see below).

The proportion of people with *outstanding debts on the credit or store cards* was only around half that of those with overdrawn bank accounts. The main exceptions are



Belgium, Ireland, Greece, Cyprus and, most especially, the UK (but see below), in all of which the proportion was over 10%, and in the UK, over 20%. Apart from these countries, together with Germany (5%), Malta (5%) and Spain (2%), the proportion was below 2% throughout the EU. In Ireland, Greece and Cyprus, the proportion with outstanding debt in this form exceeding a third of household income was around 5-7% and in the UK, 15%, where almost 9% of people had outstanding credit card debt of over 100% of monthly disposable income. The UK, therefore, stands out as having many more households with large credit card debts than other countries, though the extent to which all or most of these can be considered over-indebted is open to question.

This is all the more the case because of the form in which the question was asked in the UK. Specifically, the intention in the design of the module was to confine the uncleared balances on credit cards – and indeed on bank accounts – to those which were the result of *financial difficulties*. The aim was, therefore, to exclude those that were simply being used to divorce the timing of expenditure from that of income, to maintain a smooth flow of spending, for example, in situations where income fluctuates or to finance a purchase in advance of income becoming available (see Box above). This qualifying phrase, however, was not included in the UK questionnaire, so that all uncleared credit card balances were recorded and not just those that arose because of financial difficulties, which helps to explain the relatively large proportion of people with such balances. The same is the case in Germany and Austria in respect of overdrawn bank accounts, where again all such accounts are included in the data collected and not just those which are a result of households being in financial difficulties.<sup>30</sup>

A much smaller proportion of people were in *arrears in respect of other forms of credit or loans* for non-housing purposes. Only around 2% of people in the EU lived in households which had arrears on loans of this kind, the proportion exceeding 3% only in Cyprus and Hungary (around 5% in each), the UK (7%) and, most notably, Greece (12%). However, only in Greece (3%) and Cyprus (just over 2%), as well as, marginally, in Bulgaria and Austria, did more than 1% of people have arrears of over a third of monthly income, and only in the first two countries, did more than 1% have arrears of over 100% of income. In the case of this type of credit, it should be noted, the possibility of households using it to adjust for a mismatch between the timing of income and that of expenditure is much less of an issue than in the case of bank overdrafts or uncleared credit card balances. Accordingly, the figures ought to be more comparable across countries.

Some 4% of people in the EU lived in households which were in arrears in meeting repayments and interest charges on housing loans and/or in paying utility or other housing-related bills, the proportion exceeding 10% in Bulgaria and Greece and 9% in Latvia (Table 8). In all three countries, around 3% or more (almost 7% in Bulgaria) had arrears amounting to over a third of disposable income and in Bulgaria, around 3% had arrears of 100% of income.

**The overall proportion in the EU with arrears on other bills was also around 4%, though there was less variation in this across countries than in the case of housing related arrears. Only in Germany, Austria, Greece and Romania was the proportion with arrears on these types of bill exceeding a third of disposable income over 1% of the population and, except in Germany, the proportion with arrears of over 100% of income was much less than 1%.**

<sup>30</sup> They may also include other countries but it has not been possible to examine all of the national questionnaires used for the module.



Table 8 Proportion of people in households in arrears in servicing housing-related loans and bills and in paying other bills (% of total)

	Housing bills			Other payments		
	Total	Over 33%	Over 100%	Total	Over 33%	Over 100%
Belgium	6.4	1.8	0.6	5.9	1.0	0.5
Bulgaria	12.2	6.5	2.9	1.9	0.6	0.2
Czech Republic	1.3	0.5	0.1	0.4	0.1	0.0
Denmark	2.3	1.1	0.4	:	:	:
Germany	2.1	0.9	0.2	5.7	3.0	1.7
Estonia	2.5	0.8	0.2	0.9	:	:
Ireland	6.8	2.1	0.4	2.6	0.3	0.1
Greece	10.6	3.2	0.9	3.6	1.2	0.5
Spain	3.0	0.9	0.2	2.0	0.4	0.1
France	3.4	1.5	0.6	2.0	0.8	0.2
Italy	4.7	1.9	0.8	1.0	0.4	0.1
Cyprus	4.0	1.3	0.7	2.2	0.6	0.4
Latvia	9.2	2.7	0.8	2.6	0.6	0.2
Lithuania	2.9	:	:	1.1	:	:
Luxembourg	1.8	0.2	0.1	1.4	0.1	0.0
Hungary	4.5	1.7	0.7	2.4	0.8	0.3
Malta	2.7	1.0	0.1	0.8	0.3	0.2
Netherlands	1.0	0.4	0.1	1.5	0.7	0.2
Austria	2.3	1.4	0.6	2.3	1.6	0.6
Poland	5.1	0.0	0.0	1.9	:	:
Portugal	1.1	0.3	0.2	1.1	0.3	0.1
Romania	5.2	1.9	0.3	3.1	1.1	0.2
Slovenia	4.6	1.2	0.3	3.3	0.7	0.1
Slovakia	2.2	1.0	0.4	1.1	0.3	0.1
Finland	4.1	1.2	0.2	5.2	0.8	0.4
Sweden	0.6	0.3	0.2	0.1	0.1	0.1
UK	4.4	2.2	0.9	0.9	0.1	0.0
EU	3.8	1.4	0.5	3.6	0.9	0.4

Note: 'Total' refers to all in the category. 'Over 30%' and 'Over 100%' refer to the amounts relative to annual income  
 Source: EU-SILC 2008

### The factors underlying over-indebtedness

Although it is difficult to define over-indebtedness in a way which facilitates empirical investigation, a convenient measure, given the data compiled by the module, is a situation where overall outstanding debt, including, in particular, arrears on the costs of servicing debt exceeds 100% of monthly household disposable income. This is inevitably an arbitrary figure, which does not necessarily signify that the households concerned exhibit all the aspects of over-indebtedness listed earlier and included in the definition put forward by the study for the Commission. This is particularly so in view of the differences between countries in the way that questions on outstanding debts were framed, which mean that the proportion of households with such debts are overstated in some Member States relative to others, where the debt in question is confined to that arising because of financial difficulties. Nevertheless, despite these differences, the relative number of household with debts of which exceed their monthly net income should give a reasonable



indication of the characteristics of over-indebted households and the factors contributing to the situation.

Overall across the EU, around 5% of people in 2008 lived in households where the aggregate amount of outstanding debt was over 100% of monthly disposable income (Table 9). The proportion was particularly large in the UK (12%), in large part because of the significant number of people with large amounts outstanding on credit cards – many of whom, as indicated above may not have financial difficulties at all – and Germany (10%), primarily because of the large number with overdrawn bank accounts (which again may include many without financial difficulties). By contrast, the proportion identified as being over-indebted on this measure was 1% or less in Estonia, Lithuania, Luxembourg, Poland, Portugal, Finland and Sweden.



Table 9 Proportion living in households with outstanding debts and/or arrears of over 100% of disposable income for different categories of household (% in each group)

	Total	Income above 60% median	Income below 60% median	Materially deprived
Belgium	2.1	1.5	5.6	12.2
Bulgaria	3.9	2.5	9.0	6.5
Czech Republic	1.9	1.5	6.1	4.1
Denmark	2.0	1.6	5.4	17.7
Germany	10.2	10.4	9.3	22.2
Estonia	0.7	0.3	2.2	3.8
Ireland	3.9	3.0	8.9	8.1
Greece	5.3	3.4	12.8	11.0
Spain	1.1	0.6	3.1	8.6
France	2.3	1.7	6.6	:
Italy	3.5	2.7	6.9	9.8
Cyprus	7.8	7.6	8.7	15.1
Latvia	1.8	1.7	2.4	4.0
Lithuania	0.1	0.0	0.2	0.2
Luxembourg	0.7	0.5	2.0	5.3
Hungary	2.5	2.0	5.9	5.2
Malta	0.9	0.7	2.0	:
Netherlands	1.8	1.4	5.8	15.7
Austria	6.7	6.2	9.9	27.4
Poland	0.0	0.0	0.2	0.1
Portugal	1.0	0.8	1.7	3.5
Romania	1.7	1.1	3.1	2.7
Slovenia	4.4	4.0	6.9	13.4
Slovakia	1.9	1.3	7.4	4.2
Finland	1.0	0.6	3.3	6.4
Sweden	0.6	0.4	2.3	7.3
UK	11.8	11.3	13.7	19.1
EU	4.6	4.2	7.0	9.0

*Note:: Outstanding debts are the sum of overdrawn bank accounts, outstanding credit card balances and arrears on other credits or loans and on housing and other bills.*

*Materially deprived is defined as not being able to afford at least 3 of 9 specified items.*

*France+Malta: no data available for materially deprived. EU excludes the two for this item*

*Source: EU-SILC 2008*

There is, therefore, little relationship between over-indebtedness, or more precisely, the proportion of households with debts of over 100% of disposable income because of financial difficulties, and the overall amount of credit extended to households, examined earlier, or the rate of growth of credit. As indicated above, the UK and Germany have very different levels of debt to income ratios and equally different patterns of change in these ratios but similar proportions of people with excessive amounts of debt, according to the measure used. The same applies to Sweden and Poland, where in both cases few people have debt levels exceeding their monthly income but in the former the overall debt to income ratio is high and in the latter low. It is also apparent that there is equally





little relationship between over-indebtedness and the overall level of prosperity of countries.

### Low income

Previous studies, as noted above, have invariably found that low income is a major contributor to over-indebtedness for obvious reasons. Analysis of the data collected by the EU-SILC module also shows a larger proportion of low income households have excessive debts than higher income ones in virtually all countries. ('Low income' is measured here as equivalised household disposable income of less than 60% of the national median – the conventional measure in the EU of the risk of poverty.) However, this is not universally the case and the difference in the proportions concerned is relatively small in a number of countries.

In the EU as a whole, some 7% of people with income of less than 60% of the median lived in households with outstanding debts of more than 100% of monthly income as compared with 4.5% of those with income above this level (Table 9). In Germany, on the other hand, the proportion was larger for higher-income households than low-income ones. In Cyprus, Estonia, Latvia, Portugal and Sweden, moreover, though low-income households were more prone to over-indebtedness than higher-income ones, the difference in the two proportions concerned was less than 2 percentage points. (It was also less than this in Lithuania and Poland but in both cases, only very small proportions were over-indebted according to the measure used.)

The difference, though wider than this, was also relatively small in the UK, where a relatively large proportion of households with income above 60% of the median had debts which exceeded their monthly income, reflecting the relatively widespread use of credit cards and other forms of credit as a means of divorcing expenditure patterns from those of income. By contrast, the difference was relatively wide in Greece, where almost 13% of people with income below the poverty threshold were over-indebted as against just over 3% of those with income above this, as well as in Bulgaria and Ireland (9% in each case, around three times more than the proportion with higher income levels).

The probability of households being over-indebted is higher if they are materially deprived, according to the conventional measure of this in the EU<sup>31</sup>, than if they have income below the poverty threshold. (Although there is a reasonably close relationship between two indicators, there are still a significant number of households in all countries which are materially deprived, in the sense of not being able to afford at least three of the 9 items included in the survey specifically to measure deprivation, which have income above the poverty threshold, especially in low income countries. Equally, there are a significant number with income below the threshold which are not materially deprived according to the measure used, in this case especially in higher income countries.)

Some 9% of people in the EU identified as being materially deprived were also over-indebted according to the measure adopted here as against just under 7% of those with income below 60% of the median. The proportion was particularly large in Germany, Austria, the UK and Denmark and in each case well above the proportion of low-income households which were over-indebted. This suggests perhaps that high debt levels and the

<sup>31</sup> Defined as living in households unable to afford 3 out of 9 basic items for which information is collected by the EU-SILC – or more precisely, unable to afford 7 items plus not being able to meet unexpected expenses and being arrears on household housing expenses, household bills or loan repayments. The last, of course, is included as part of over-indebtedness so that to this extent there is some overlap between this and the indicator of material deprivation.



related servicing costs are liable to give rise to an inability to afford essential items but are not necessarily associated with low income levels.

By contrast, in many of the countries which entered the EU in 2004 and 2007, the reverse is the case in that more people with income below 60% of the median were over-indebted than those measured as being materially deprived. In these cases, low income seems a better measure of relative deprivation and an inability to meet expenditure commitments than the measure of material deprivation which applies to many more households with income above the poverty threshold than in EU-15 countries. At the same time, the proportion of households with excessive debt levels was, in general, much smaller in these countries than in the EU-15, possibly reflecting more limited access to credit as much as a more cautious attitude towards building up debts.

### **The link between over-indebtedness and age**

Previous research has generally found that young people are most at risk of becoming over-indebted irrespective of their income levels, partly because they tend to be less reluctant to use credit to finance expenditure as well as having more need to incur high expenditure – on, for example, buying a house and furnishing it or having young children. The data compiled by the module indicate that the increased probability of being over-indebted among young people is relatively small and in many countries hardly evident at all, though they confirm the low probability among older people of 65 and over.

In the EU as a whole, the proportion of young people aged 16-24 who were over-indebted in 2008 was only slightly larger than for those aged 25-64 (around 6% as opposed to just over 5%) and similarly, it was only marginally larger among those aged 25-39 than for those aged 40-64 (Table 10). All three proportions, however, were much smaller than for those aged 65 and over (under 2%), while the largest proportion was among children (here defined as those under 16) – i.e. children were more likely to live in households that were over-indebted than any other age group.

The is pattern of difference between age groups was common to most Member States, with the marked exception of the UK and, to a lesser extent, Austria, Bulgaria and Ireland, in all of which the highest rate of indebtedness, excluding children, was among those aged 25-39. In all countries without exception, the lowest rate of over-indebtedness was among those aged 65 and over, the proportion exceeding 2% only in Germany, Greece, Austria, the UK and Bulgaria.

Since over-indebtedness is measured on a household rather than an individual basis, however, it is more instructive to examine rates for households consisting only of people in the different broad age groups –i.e. to compare rates for those aged 25-39 living in households comprising only people in this age group, for example, with those in older age groups similarly sharing households with people of their own age (in the last three columns of Table 10)<sup>32</sup>.

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<sup>32</sup> Those aged 16-24 are excluded from this comparison because of the small numbers living in households made up only of people in this age group in many countries.



Table 10 Proportion of those in broad age groups with outstanding debts of over 100% of household disposable income (% of each group)

	Total	Age					Households with all adults aged:		
		0-15	16-24	25-39	40-64	65+	25-39	40-64	65+
Belgium	2.1	3.4	2.8	2.3	1.9	0.3	2.3	2.2	0.2
Bulgaria	3.9	7.0	3.6	4.7	3.2	2.1	6.8	4.3	1.3
Czech Republic	1.9	2.6	2.4	2.1	2.0	0.4	2.2	2.4	0.1
Denmark	2.0	2.4	4.3	2.5	1.6	0.4	2.7	1.8	0.4
Germany	10.2	14.1	12.4	10.8	11.5	3.4	11.7	10.9	2.8
Estonia	0.7	1.1	0.6	0.6	0.8	0.2	1.0	1.6	0.2
Ireland	3.9	5.0	4.0	4.6	3.8	0.7	4.4	3.3	0.2
Greece	5.3	5.6	6.2	5.9	5.8	3.0	5.0	5.6	2.0
Spain	1.1	1.9	1.9	1.1	0.9	0.3	1.3	1.3	0.1
France									
Italy	3.5	4.8	5.5	3.9	3.6	1.0	4.3	3.4	0.7
Cyprus	7.8	10.9	9.3	9.3	7.0	1.1	10.7	8.0	0.8
Latvia	1.8	2.4	2.1	2.3	1.7	0.9	3.1	1.4	0.8
Lithuania	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.4	0.0
Luxembourg	0.7	0.9	0.7	1.1	0.5	0.0	0.8	0.1	0.0
Hungary	2.5	3.3	4.1	2.2	2.5	0.6	2.8	2.7	0.3
Malta									
Netherlands	1.8	2.4	2.4	2.6	1.6	0.3	2.5	1.8	0.3
Austria	6.7	8.5	7.7	8.3	6.8	2.3	8.4	7.3	1.9
Poland	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	1.0	2.1	1.3	0.9	0.9	0.1	1.2	1.6	0.0
Romania	1.5	2.3	1.6	1.2	1.8	0.6	1.2	1.6	0.4
Slovenia	4.4	5.1	6.8	4.4	4.6	1.0	4.3	4.5	0.5
Slovakia	1.9	3.7	2.2	2.2	1.6	0.1	2.8	2.3	0.0
Finland	1.0	1.0	1.0	1.3	1.2	0.2	1.1	1.4	0.1
Sweden	0.6	0.9	0.7	0.7	0.7	0.1	0.7	0.6	0.1
UK	11.8	16.3	12.9	16.6	10.8	2.3	17.2	10.5	1.7
EU	4.9	6.8	5.9	5.4	5.1	1.5	6.3	5.8	1.2

Source: EU-SILC 2008

Such a comparison shows much the same pattern of difference in rates of over-indebtedness between the age group, though the scale of the difference tends to be larger than when households are not confined to those comprising only particular age groups. Moreover, in a few countries, the difference in the proportion who are over-indebted between the 25-39 and 40-64 age groups is reversed, though not in all cases in the same direction. In Germany and Hungary, confining the comparison to single age group members, shows the rate of over-indebtedness to be higher among 25-39 year-olds than for those aged 40-64 rather than the reverse. In Greece and the Czech Republic, it shows it to be lower – i.e. households consisting of those that those aged 25-39 are slightly less likely to be over-indebted than those aged 40-64.

### Families with children

As the above table implies and as previous research has tended to conclude, households with children are more likely to be in financial difficulties than those without. This reflects the tendency for families with children to have a large proportion of expenses that are fixed, as well as the fact that many mothers stop working when they have a baby or



reduce their hours of work and, therefore, the income they bring into the household tends to diminish. These findings are confirmed by the module. Those living in households with children (including the children in the calculation) had a higher rate of over-indebtedness than those without children in virtually all countries (the only exception is Poland where there are doubts about the figures) and in most cases, markedly so (Table 11).

However, there is much less evidence of a common tendency for over-indebtedness to rise with the number of children. While overall, the proportion of those living in households with three or more children that were over-indebted was significantly larger than for those with fewer children, this was not the case in Greece, Cyprus, Latvia, Ireland, Luxembourg, the Netherlands and Austria. On the other hand, having a large family seems to add significantly to the chances of being over-indebted in Bulgaria, Germany, Spain, Hungary, Slovenia and Slovakia. Moreover, in all of these countries as well as many of the others, although large families are also more likely to have a low level of income than smaller ones, the effect of children on the risk of over-indebtedness acts independently of income levels.

**Table 11 Proportion of those in different types of household with outstanding debts of over 100% of household disposable income (% of each group)**

	Households with:				Household Type		
	No child	1 child	2 children	3+ children	Living alone	Single parent	Other
Belgium	1.4	1.7	2.8	4.5	2.2	4.0	1.9
Bulgaria	1.8	5.3	4.8	13.5	3.2	8.6	3.9
Czech Republic	1.6	1.7	2.9	3.5	2.3	3.9	1.8
Denmark	2.0	1.6	1.7	3.7	3.1	4.4	1.4
Germany	8.0	13.3	13.3	18.1	6.8	13.6	10.8
Estonia	0.5	0.6	1.2	1.1	1.2	1.9	0.5
Ireland	2.8	4.5	5.0	4.6	2.5	7.0	3.7
Greece	4.8	7.3	5.3	4.4	5.5	17.3	5.2
Spain	0.6	1.2	1.8	5.6	0.9	7.6	1.0
France							
Italy	2.3	5.1	4.8	6.7	2.6	6.5	3.5
Cyprus	4.6	11.0	11.3	9.7	5.4	27.1	7.3
Latvia	1.6	2.1	2.9	0.5	1.9	3.7	1.7
Lithuania	0.0	0.2	0.0	0.0	0.0	0.8	0.0
Luxembourg	0.4	1.8	0.4	0.6	0.6	0.5	0.7
Hungary	1.6	3.2	2.8	5.8	1.8	4.8	2.4
Malta							
Netherlands	1.5	1.9	2.6	1.9	3.2	5.2	1.4
Austria	5.6	7.3	9.0	7.5	6.5	15.7	6.2
Poland	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Portugal	0.3	1.5	1.3	4.9	0.5	6.9	0.8
Romania	1.3	1.0	1.6	4.2	1.3	7.3	1.4
Slovenia	3.5	5.7	4.2	8.1	3.2	10.5	4.2
Slovakia	1.0	2.3	2.5	6.3	1.4	5.8	1.9
Finland	1.0	1.2	0.2	1.6	2.1	2.5	0.6
Sweden	0.5	0.7	0.6	1.4	0.8	2.1	0.5
UK	8.4	14.0	15.4	18.5	8.2	15.0	12.1
EU	3.8	5.5	6.2	9.1	4.3	9.5	4.8

Source: EU-SILC 2008



Nevertheless, it is not universally the case that larger families are more prone to over-indebtedness if they have low levels of income. In Spain and Slovenia, in particular, such households tended to have less risk of over-indebtedness than smaller ones and it is among households with higher income levels that having more children adds significantly to the probability of over-indebtedness (not shown in the Table). The same is true, if to a lesser extent in the Czech Republic and, in some degree, in Bulgaria, where the differences in rates of over-indebtedness between large and small families was very much larger among those with higher income levels. By contrast, in Romania, Slovakia and the UK, and, to a lesser extent, Finland and Sweden, it is among low-income households, in particular, that having more children adds to the chances of being over-indebted.

### **The link with household types and marital status**

In nearly all countries, it is also the case that the risk of over-indebtedness is increased significantly if there is only one parent in households with children. Across the EU as whole, just under 10% of those living in lone parent households (including the children) were over-indebted, twice the proportion among other types of households, the difference being especially pronounced in Greece, Spain, Cyprus, Austria, Portugal, Romania and Slovenia. This difference, however, though it is not simply a result of lone parents tending to have lower income levels than other households, is not so marked or widespread if lone parents with income below the poverty threshold are considered separately. In the Czech Republic, Denmark, Luxembourg, Sweden, Ireland, Latvia and Slovakia, the proportion of those living in lone parent households that were over-indebted was smaller among those with low income than for other households, while in Germany and Bulgaria, there was little difference in the proportion between the two groups (less than 1 percentage point).

In line with existing research findings, it is equally the case that the risk of over-indebtedness tends to be higher among people experiencing marriage break-up, reflecting perhaps both the costs and the emotional effects that are often associated with it. An average of 7.5% of those who were separated or divorced were over-indebted in 2008, almost twice the proportion of those who were married (4%) and 50% more than those who were single and had never been married (Table 12).

The higher rate of over-indebtedness among those who had experienced marriage break-up was common to all Member States, with the partial exception of the UK, where it was highest among those who had never been married (over 15%) – though the rate among the separated or divorced was close to 13%, the second highest in the EU. The difference was especially pronounced in Greece, Cyprus and Austria, in each of which the proportion concerned was 12% or more.

The relatively high risk of indebtedness associated with marital break-up is independent of income levels and is just as evident among those with income above the poverty threshold as among those with income below it throughout the EU.



Table 12 Proportion of those in households with outstanding debts of over 100% of household disposable income by marital status (% of each group)

	Never married	Married	Separated/divorced	Widowed
Belgium	2.0	1.5	2.4	0.6
Bulgaria	3.2	3.3	4.8	2.3
Czech Republic	2.2	1.4	3.8	0.5
Denmark	2.7	1.1	2.5	0.6
Germany	8.1	9.7	11.2	4.0
Estonia	0.9	0.4	1.3	0.2
Ireland	3.1	3.5	7.1	2.0
Greece	4.9	4.9	12.4	3.7
Spain	0.9	0.6	3.4	0.8
France				
Italy	3.1	3.0	4.4	1.5
Cyprus	6.4	6.4	13.9	4.3
Latvia	2.5	1.0	2.9	1.2
Lithuania	0.1	0.0	0.3	0.1
Luxembourg	0.6	0.5	1.4	0.2
Hungary	1.8	1.9	2.6	2.0
Malta				
Netherlands	2.7	1.1	3.0	0.3
Austria	7.0	5.3	12.0	2.9
Poland	0.0	0.0	0.1	0.0
Portugal	0.9	0.5	3.8	0.3
Romania	1.8	1.2	3.3	0.9
Slovenia	4.6	3.3	7.6	2.2
Slovakia	1.4	1.6	3.0	0.7
Finland	1.7	0.5	1.9	0.4
Sweden	0.5	0.4	1.5	0.0
UK	15.4	9.3	12.8	3.2
EU	5.0	4.1	7.5	1.7

Source: EU-SILC, 2008

### Link to housing tenure

Previous research has found that living in rented accommodation tends to be associated with an increased probability of being in financial difficulties, reflecting perhaps the relatively high housing costs that those paying rent are likely to face, as well as the fact that the people concerned tend disproportionately to have relatively low income levels. The risk seems to be particularly high for those living in social housing, partly reflecting low income levels. By contrast, owner-occupied housing seems to be linked with a lower risk of over-indebtedness, though less so for those with mortgages.

These findings are broadly confirmed by the module. Across the EU as a whole, those living in rent-free accommodation had the lowest probability of over-indebtedness in 2008 (2%), followed closely by owner-occupiers (3%) who had paid off any mortgage they might have had (Table 13).

Owner occupiers with mortgages were twice as likely to be over-indebted as those without, though less so than those in paying rents. Among the latter, perhaps surprisingly, people in subsidised housing – which should include social housing – were slightly less likely to be over-indebted than those paying market rent.



Table 13 Proportion of those in households with outstanding debts of over 100% of household disposable income by housing tenure (% of each group)

	Tenure Status				
	Owner occupied without mortgage	Owner occupied with mortgage	Market rent	Subsidised rent	Rent-free housing
Belgium	0.7	2.2	4.1	2.3	3.4
Bulgaria	3.0	7.1	1.3	17.9	5.5
Czech Republic	1.4	3.7	4.5	1.7	2.8
Denmark	0.8	1.2	3.8		
Germany	9.6		10.9	13.5	6.8
Estonia	0.6	1.2	3.4	0.0	0.2
Ireland	3.5	4.2	2.6	5.1	8.1
Greece	4.1	6.1	9.6	0.0	4.5
Spain	0.3	2.0	2.3	1.4	0.8
France					
Italy	2.2	5.2	5.4	6.5	4.5
Cyprus	6.9	14.8	4.4	<b>12.3</b>	5.0
Latvia	1.2	4.3	3.6	6.8	0.0
Lithuania	0.1	0.0	0.0	0.0	0.0
Luxembourg	0.1	0.8	0.9	0.1	3.3
Hungary	1.8	4.6	3.4	6.6	1.9
Malta					
Netherlands	1.1	1.0	3.5		3.9
Austria	1.5	7.7	10.9	9.4	2.2
Poland	0.0	0.0	0.2	1.4	0.0
Portugal	0.2	2.1	1.3	1.7	0.1
Romania	1.4	2.5	0.0	8.5	2.7
Slovenia	3.8	8.7	6.2	12.6	4.1
Slovakia	1.3	6.1	5.1	0.0	2.6
Finland	0.2	0.6	2.4	2.7	0.5
Sweden	0.4	0.3	1.2	3.1	
UK	3.2	16.1	16.0	11.6	15.1
EU	3.2	6.3	8.2	8.7	2.3

Note: Empty cells indicate no observations or an insufficient number to be statistically reliable.  
 Figures in italics indicate that the number of observations is small and that they are therefore of uncertain reliability

Source: EU-SILC 2008

This pattern of differences is broadly evident in most Member States and seems to reflect differences in the housing costs which households need to meet out of their disposable income as much as differences in income levels. Differences in the burden of housing costs is particularly apparent if the comparison is confined to households with low levels of income, specifically those with income below 60% of the median. For these, the risk of over-indebtedness shows a different pattern than for households as a whole, or indeed for those with income above 60% of the median. The proportion with low income levels who were over-indebted was, therefore, significantly larger, on average, among those living in owner-occupied housing with a mortgage (almost 15%) than among those living in rented accommodation (around 10%) (Table 14).

It was also the case in most Member States where the number of observations is large enough to make comparisons, most especially in the UK, where some 28% of those with mortgages had outstanding debts of more than 100% of disposable income as against 16% of those paying market rents.



Table 14 Proportion of those in households with income below 60% of the median with outstanding debts of over 100% of disposable income by housing tenure (% of each group)

	Tenure Status				
	Owner occupied without mortgage	Owner occupied with mortgage	Market rent	Subsidised rent	Rent-free housing
Belgium	0.5	10.3	8.8	4.4	0.0
Bulgaria	7.0	29.3		25.4	
Czech Republic	4.8	9.5	10.7	4.8	11.3
Denmark	2.6	4.4	7.2		0.0
Germany	9.8	0.0	9.4	8.4	<b>6.1</b>
Estonia	2.0	0.0	17.7	0.0	0.4
Ireland	8.1	14.0	2.7	10.6	7.7
Greece	10.0	19.4	19.0	<b>0.0</b>	
Spain	1.0	7.6	4.8	2.5	2.7
France					0.0
Italy	3.6	13.3	10.0	12.5	8.0
Cyprus	10.9	13.3	8.7		3.5
Latvia	1.6	0.0	5.2	9.5	0.0
Lithuania	0.2	0.0	<b>0.0</b>	0.0	0.0
Luxembourg	0.0	2.7	2.1	0.6	
Hungary	5.4	9.0	1.3	8.5	
Malta					0.0
Netherlands	2.0	0.8	8.5		10.0
Austria	3.6	14.0	13.2	15.0	1.2
Poland	0.0	0.0	0.9	5.5	0.2
Portugal	0.2	4.8	4.0	4.0	0.3
Romania	2.8	0.0		<b>26.7</b>	2.4
Slovenia	5.0	18.0	8.2	23.8	8.9
Slovakia	4.3	25.5	16.9	<b>0.0</b>	
Finland	0.5	4.9	4.1	5.2	<b>1.3</b>
Sweden	1.5	2.7	2.0	10.0	0.0
UK	4.6	28.4	15.5	12.4	
EU	3.7	14.7	9.3	10.1	

Note: Empty cells indicate no observations or an insufficient number to be statistically reliable. Figures in italics indicate that the number of observations is small and that they are therefore of uncertain reliability

Source: EU-SILC 2008

### The effect of unemployment on over-indebtedness

Previous studies have not in all cases found a causal link between unemployment, or someone losing their job, and over-indebtedness once other factors associated with unemployment are taken into account, particularly, the reduction in income which accompanies it. Since the EU-SILC module provides information only at one point in time, it is difficult to examine the effect of job loss on household debts. The module, however, includes questions on whether or not households have suffered a major drop in income over the previous 12 months and the reasons for this, which gives some indication of how far a loss of job is behind over-indebtedness. The data collected in this regard are examined below after considering the evidence on the effect of unemployment *per se*.





Since over-indebtedness relates to the situation at the household level, there is a need to consider the employment status of all household members and not simply to examine the indebtedness of individuals who are out of work. This can be done by focusing on the work intensity of households – i.e. the extent to which people of working-age living in the household are employed – rather than unemployment as such<sup>33</sup>. This varies between zero when no-one of working-age in the household was employed over the preceding year to one when everyone was employed full-time.

In practice, little relationship is evident between the work intensity of households and their debts (Table 15).

**Table 15 Proportion of those in households with outstanding debts of over 100% of disposable income by work intensity (% of each group)**

	0-0.19	0.20-0.50	0.51-0.74	0.75-1.0
Belgium	4.6	4.0	0.6	1.3
Bulgaria	10.0	4.8	4.0	2.2
Czech Republic	2.5	2.1	2.9	1.8
Denmark	5.0	3.2	2.6	1.4
Germany	8.9	12.3	13.5	12.0
Estonia	2.4	0.8	0.2	0.6
Ireland	2.6	6.1	2.2	3.9
Greece	8.3	5.8	6.7	4.5
Spain	1.5	2.3	0.5	0.8
France				
Italy	4.2	5.1	3.5	2.8
Cyprus	8.1	9.6	7.0	8.4
Latvia	2.8	2.2	2.7	1.5
Lithuania	0.0	0.0	0.0	0.1
Luxembourg	0.6	0.8	1.6	0.4
Hungary	3.4	3.9	2.2	1.5
Malta				
Netherlands	4.5	1.3	1.5	1.8
Austria	8.2	8.2	9.5	5.7
Poland	0.2	0.0	0.0	0.0
Portugal	2.0	1.3	1.2	0.8
Romania	2.9	2.2	1.1	1.0
Slovenia	5.2	5.7	4.6	4.2
Slovakia	3.1	2.0	2.2	2.0
Finland	2.7	1.2	0.8	0.8
Sweden	2.3	1.4	0.1	0.6
UK	10.6	15.3	12.3	14.3
EU	5.7	5.7	5.4	5.3

Source: EU-SILC 2008

Over the EU as a whole, much the same proportion of people living in households where work intensity was low (less than 0.2, implying either no-one was employed or someone was employed but for very few hours during the year) were over-indebted as in households where it was high (where everyone was in employment). In a number of Member States, however, there is evidence of a tendency for the proportion to be larger in households with low work intensity. This was the case in Belgium, Denmark Bulgaria,

<sup>33</sup> Work intensity is, in effect, measured as the hours worked over the year by household members aged 16-64 relative to the number of hours which would be worked if everyone in the household of this age were to be employed full-time over 12 months. It, therefore, take explicit account of the extent of part-time working as well as spells of unemployment or inactivity during the year.



Greece, the Netherlands, Romania, Finland and Sweden. On the other hand, in Germany and the UK, and to a lesser extent in Ireland, the proportion was smaller in households with low work intensity than in those with higher levels. Over-indebtedness, therefore, does not seem to be associated with unemployment in these latter countries, while in many others, no significant association is evident.

This conclusion does not change if the analysis is confined to households with income either above or below the poverty threshold: the rate of over-indebtedness among households with different levels of work intensity shows a similar pattern across Member States as when all households are covered. Focusing on those with income below 60% of the median, the rate of over-indebtedness was higher in 2008 in households with high work intensity than in those where it was low (Table 16). This which might reflect a tendency for the former group to have more access to credit, because they are working, than the latter group.

**Table 16 Proportion of those in households with income below 60% of the median with outstanding debts of over 100% of disposable income by work intensity (% of each group)**

	0-0.19	0.20-0.50	0.51-0.74	0.75-1.0
Belgium	5.1	9.3	0.0	16.3
Bulgaria	14.4	8.1	19.3	0.7
Czech Republic	5.1	6.5	16.4	8.6
Denmark	8.6	6.0	5.3	4.5
Germany	9.2	10.4	12.2	16.9
Estonia	3.0	2.0	0.0	4.9
Ireland	4.5	13.1	2.9	17.6
Greece	16.8	11.7	19.3	15.7
Spain	2.2	4.3	1.1	5.9
France				
Italy	7.8	8.2	5.5	11.7
Cyprus	12.5	11.1	9.5	14.4
Latvia	3.2	3.0	3.3	2.0
Lithuania	0.0	0.0	0.0	1.5
Luxembourg	1.9	0.9	5.0	2.7
Hungary	5.8	8.3	0.0	2.6
Malta				
Netherlands	10.7	1.6	6.2	5.3
Austria	13.9	12.6	5.9	10.7
Poland	0.5	0.0	0.0	0.2
Portugal	4.3	1.3	1.0	1.7
Romania	6.4	4.1	0.2	1.1
Slovenia	9.1	7.9	15.6	6.4
Slovakia	7.4	4.3	18.7	11.9
Finland	3.3	1.9	7.1	11.0
Sweden	2.1	3.0	0.9	5.0
UK	13.7	20.6	21.3	22.7
EU	8.2	7.3	7.5	9.4

Source: EU-SILC 2008

### The effect of a major drop in income

While unemployment in itself might not necessarily be associated with high debt levels, the loss of a job, or becoming unemployed after being used to having a job might, nevertheless, give rise to increased debt levels. Indeed, a number of previous studies have found this to be the case as the households affected attempted to maintain expenditure



levels, or at least prevent them from falling by too much (see above). As noted above, the module allows the effect on indebtedness of a major loss of income to be examined.

Overall some 20% of people in the EU, one in five, reported that their household had experienced a major drop in income over the 12 months preceding the time they were surveyed in 2008 (Table 17). This relatively large number may reflect the initial signs of the economic recession which began in some countries during 2008. The proportion was well above average in both Italy (33%) and Portugal (25%), countries which had experienced low growth of both the economy and real income for many years before 2008, while it was also above in Spain, Hungary, Latvia, Lithuania, the UK, Bulgaria and, to a lesser extent, Ireland, all countries where the recession hit earlier than elsewhere.

**Table 17 Proportion of people living in households experiencing a major drop in income and the main reasons for this (% of each category)**

	Total Major drop in income	Due to:							Other
		Job loss	Sickness/ disability	Drop in wages/ hours	Caring for child	Retire- ment	Marriage break-up	Other change in household	
Belgium	10.3	2.3	1.5	0.8	1.6	0.6	0.2	0.5	2.8
Bulgaria	21.9	8.3	2.4	1.9	2.8	0.7	0.2	0.9	4.8
Czech Republic	17.6	2.9	1.0	2.1	2.6	0.9	0.4	1.8	5.9
Denmark	11.1	1.0	2.4	1.2	1.2	1.5	0.5	0.2	3.1
Germany	13.9	2.7	2.6	1.3	1.5	1.1	0.4	0.3	3.9
Estonia	9.4	3.4	2.6	0.8	1.2	0.3	0.2	0.6	0.4
Ireland	20.4	5.5	3.4	2.3	1.3	0.5	0.4	1.2	5.9
Greece	18.6	5.9	3.3	1.5	1.0	1.4	0.2	1.5	3.7
Spain	26.6	8.1	3.5	1.6	1.2	0.7	0.2	0.7	10.6
France	:	:	:	:	:	:	:	:	:
Italy	33.2	2.7	5.8	0.9	1.0	1.2	0.5	1.9	19.1
Cyprus	14.3	4.8	5.3	1.7	0.4	0.5	0.2	0.8	0.5
Latvia	21.8	6.1	3.5	1.6	1.3	0.3	0.3	1.1	7.7
Lithuania	23.1	5.0	1.5	1.9	2.2	0.2	0.3	1.3	10.7
Luxembourg	12.9	3.3	1.0	0.8	1.3	1.2	0.4	0.3	4.3
Hungary	27.9	7.8	3.3	2.3	2.4	0.9	0.7	1.9	6.9
Malta	:	:	:	:	:	:	:	:	:
Netherlands	9.8	2.2	1.6	1.2	0.3	0.7	0.3	0.2	3.2
Austria	19.3	2.6	1.7	1.0	1.7	1.3	0.5	0.9	9.5
Poland	17.1	3.6	3.0	1.4	0.8	0.5	0.4	1.3	6.2
Portugal	25.4	7.8	3.9	2.2	0.6	0.4	0.3	1.1	9.1
Romania	6.2	2.1	2.0	0.3	0.2	0.2	0.1	0.4	0.9
Slovenia	12.3	4.2	1.7	1.7	0.8	1.1	0.0	0.3	2.5
Slovakia	17.0	3.3	1.6	2.1	2.2	1.2	0.3	0.9	5.3
Finland	13.3	2.9	2.8	1.5	2.4	1.0	0.2	0.2	2.3
Sweden	13.0	1.7	2.0	1.0	2.4	1.2	0.3	1.8	2.6
UK	23.8	5.0	5.9	1.8	1.9	1.2	0.5	0.7	5.2
EU	20.1	4.1	3.6	1.4	1.4	0.9	0.4	0.9	7.3

Source: EU-SILC 2008

In all these countries, with the exception of Italy, job loss was an important cause of the drop in income, around 8% of the population in Spain, Hungary, Portugal and Bulgaria suffering a major drop in income because of this and 5-6% in Ireland, Greece, Latvia, Lithuania and the UK. The implication is, therefore, that loss of a job and becoming unemployed might well be a significant factor underlying over-indebtedness in these countries.



There is a clear association in virtually all countries between over-indebtedness and suffering a large reduction in income. In the EU as a whole, a third of those who were over-indebted in 2008 had experienced a major drop in income over the preceding 12 months as opposed to 19% of those who were non-indebted (Table 18). The proportion was particularly large in Spain (78%) and Ireland (59%), in both cases three times as large as those who were not indebted, and over half in Italy and Portugal. In 7 other countries, the proportion was over 40%, so that in almost half of Member States, the proportion was above this figure.

**Table 18 Proportion of those in over-indebted households that experienced a major drop in income over the preceding year (% of each group)**

	% experiencing a major drop in income					
	Total		With income above 60% of median		With income below 60% of median	
	Over-indebted	Other	Over-indebted	Other	Over-indebted	Other
Belgium	22.0	10.0	26.2	9.9	15.4	11.1
Bulgaria	41.1	20.9	39.1	19.6	43.2	26.2
Czech Republic	35.5	17.3	31.2	15.5	46.1	35.7
Denmark	37.7	10.4	39.9	10.6	33.0	9.0
Germany	25.5	12.6	24.0	12.2	34.4	14.5
Estonia	32.3	9.3	14.8	9.8	43.3	7.0
Ireland	59.1	18.7	62.5	18.4	53.1	20.5
Greece	41.7	17.3	36.0	15.8	47.7	23.8
Spain	77.6	25.9	78.8	24.4	76.6	32.4
France						
Italy	50.8	32.5	51.0	31.7	50.5	36.4
Cyprus	27.4	13.1	26.9	14.0	29.7	8.6
Latvia	44.9	21.3	50.2	20.3	34.0	24.1
Lithuania		23.0		21.0		31.0
Luxembourg	43.1	12.7	28.1	12.7	64.8	12.7
Hungary	47.5	27.4	44.7	25.9	54.4	38.5
Malta						
Netherlands	26.7	9.3	24.0	8.8	32.0	14.2
Austria	31.2	18.2	31.2	17.3	31.1	25.2
Poland		16.3		15.5		20.7
Portugal	50.7	24.9	67.5	23.1	15.8	33.1
Romania	19.5	5.9	17.2	4.3	22.1	11.5
Slovenia	23.6	11.8	20.7	11.3	35.4	16.0
Slovakia	43.2	16.5	40.5	14.8	47.0	30.9
Finland	32.2	13.1	31.5	12.4	33.0	17.1
Sweden	43.2	12.2	47.1	12.0	37.5	13.5
UK	33.0	21.4	31.5	20.6	38.3	25.0
EU	33.3	19.2	30.8	18.2	41.3	24.2

Note: Where figures are not shown, the number of observations is too small to be reliable.

Source: EU-SILC 2008

In all countries, those who were over-indebted were more likely to have suffered a major reduction in income than those who were not over-indebted. This suggests that a fall in income was a significant factor underlying the over-indebtedness, though it does not necessarily mean that it was the only or the main reason. Indeed, in most countries, the



majority of households that were over-indebted did not experience such a fall, which might imply that the problem was longer-standing.

Much the same picture is evident if households are divided between those with income above the poverty threshold and those with income below in the preceding year, implying that the effect of a drop in income on indebtedness is independent of the level of income as such. Those with low income who were over-indebted, however, were more likely, in most countries, to have experienced a drop in income than those with a higher level, though in many cases, the difference is not large. The main exception is Portugal, where only a relatively small proportion of those with low income (16%) who were over-indebted had suffered a major reduction in income over the preceding year, less than those who were not over-indebted, implying that for such households the factors which led to an accumulation of debts were longer-standing. At the same time, a reduction in income seems to be a significant factor underlying the over-indebtedness of those with income above the poverty threshold (two-thirds of these experiencing such a reduction).

The relationship between over-indebtedness and a drop in income can also be examined the other way round, in the sense of considering the proportion of those who had experienced a recent reduction in income who were over-indebtedness at the time of the survey. This may give some indication of the probability of a major drop in income – such as has been suffered by many in the past two years of economic downturn – leading to over-indebtedness, even if such a direct causal link cannot necessarily be assumed, insofar as other factors could have contributed to any observed relationship.

In practice, those experiencing a major drop in income were twice as likely on average to have been over-indebted in 2008 as those not experiencing such a drop. Some 8% of the former group across the EU, therefore, were over-indebted at the time of the survey as opposed to 4% of the latter group, the proportion of the former rising to 17-19% in Germany and the UK, 15% in Cyprus and 12% in Greece, in the last, over three times larger than for those not experiencing a drop in income (Table 19).



Table 19 Proportion of those in households suffering/not suffering a major drop in income with outstanding debts of more than monthly disposable income (% of each group)

	Total		Income <60% median	
	Major drop in income	No major drop in income	Major drop in income	No major drop in income
Belgium	4.5	1.8	7.5	5.3
Bulgaria	7.4	2.9	13.9	7.0
Czech Republic	3.9	1.5	7.8	5.2
Denmark	6.9	1.4	17.6	4.1
Germany	18.7	8.8	19.6	7.3
Estonia	2.4	0.5	12.3	1.4
Ireland	11.4	2.0	20.4	5.5
Greece	12.0	3.8	22.7	9.1
Spain	3.3	0.3	6.9	1.1
France				
Italy	5.3	2.5	9.3	5.4
Cyprus	15.0	6.6	24.7	6.8
Latvia	3.8	1.3	3.3	2.1
Lithuania	0.2	0.0	0.7	0.0
Luxembourg	2.2	0.4	9.5	0.8
Hungary	4.2	1.8	8.1	4.4
Malta				
Netherlands	5.1	1.5	12.2	4.7
Austria	10.9	5.7	12.0	9.2
Poland	0.1	0.0	0.3	0.1
Portugal	2.0	0.6	0.8	2.1
Romania	4.8	1.3	5.7	2.7
Slovenia	8.3	3.8	14.1	5.4
Slovakia	4.9	1.3	10.8	5.7
Finland	2.4	0.8	6.3	2.7
Sweden	2.1	0.4	5.9	1.6
UK	17.1	10.2	19.6	11.6
EU	8.2	4.1	11.1	5.3

Source: EU-SILC 2008

Those with low incomes were especially vulnerable to experiencing over-indebtedness in the event of their income falling substantially, 11% of those in this position being over-indebted in the EU as a whole, again twice the proportion for those not suffering a drop in income, and around 20% in Germany, the UK and Ireland and 23-25% in Greece and Cyprus.

This suggests that the economic recession, which largely occurred after the data summarised above were collected, and the job losses and reduction in incomes which it gave rise to, will not only have led to an increase in over-indebtedness – in some countries much more than others – but that the households affected are likely to be disproportionately those with low income levels initially.

## Conclusions

In most EU countries, there was a large build-up of consumer debt in the run-up to the financial crisis in 2007-2008 which preceded the global recession in 2008-2009. This accumulation of debt, however, does not seem to have been associated with any marked increase in the relative number of households with financial difficulties, as



indicated by the proportion of people reporting in the EU-SILC – and before that in the EUCHP – having problems making ends meet or being behind in their payment of bills. The accumulation of debt in itself, therefore, does not inevitably give rise to growing financial problems among households.

However, the widespread cutback in credit as banks and other financial institutions tightened their lending in response to the crisis, coupled with the job losses and reduction in earnings which have accompanied the economic downturn, have made it more difficult for many households to service their debt. This is reflected in an increase in the proportion of households reporting having difficulty making ends meet as the downturn in economic activity began in 2008. The countries in which this occurred were not in all cases those in which the amount of debt outstanding had risen by most in the earlier years, highlighting the complex relationship between the accumulation of debt and the prevalence of financial problems among households. They were, on the other hand, either countries in which the economic downturn hit relatively early and was already evident in 2008 when the EU-SILC survey was conducted or countries, such as Italy, Portugal, Greece and Hungary, which had economic problems before the onset of the global recession, which in the case of the first two, are long-standing ones resulting in slow growth throughout the decade.

The *ad hoc* module on over-indebtedness included as part of the EU-SILC survey in 2008, gives an insight into both the relative number of households which have high amounts of outstanding debt relative to income in the different Member States and their characteristics. Although the results as regards the former are difficult to interpret because of differences in the way questions were framed in the different countries which makes comparisons of the overall proportions hazardous, the data should, nevertheless, give an indication of the types of household with high debt levels.

They indicate that although high levels of debt relative to income tend to be more prevalent among households with low income than higher levels across the EU, this is not invariably the case and the difference between the relative numbers concerned is not large in most countries. They also indicate that older people of 65 and over are less likely to have high levels of debt than other age groups but that the incidence of high debt levels does not tend to vary much with age among the population of working age. Households with children, however, are more likely to have high ratios of debt to income than those without, which is also the case for people who have been involved in marriage break-up as well as lone parents.

In addition, the scale of housing costs that households need to meet seems to affect whether or not they have high debt levels. Those who rent their accommodation, therefore, and are more prone to have high debt levels than those who own the house in which they live, while among the latter, perhaps not surprisingly, those who have paid off their mortgage are less likely to have high levels of debt (other than the mortgage itself) than those who still have mortgages outstanding. This is especially so for those with low levels of income, for whom the burden of servicing their mortgages tends to mean that they are more likely to have high debt levels than those who rent their accommodation.

High debts levels are not necessarily linked to being out of work. While in a number of countries, households with low work intensity are, on average, more prone to having high debt levels than those with higher levels, in others this is not the case and in Germany and the UK, the reverse applies – households with low work intensity being less likely to have



high levels of debt. This almost certainly reflects the greater difficulty people who are not working have in securing credit than those in regular full-time employment.

Nevertheless, a sudden drop in income seems to be an important cause of a high level of indebtedness throughout the EU and, in many countries, such a drop was a result of a loss of job in the year leading up to the survey in 2008, when the economic downturn began to hit Member States. This was especially the case for those with low income levels before the drop in income occurred, which suggests that it is this group who were most vulnerable to experiencing high debt levels as the economic downturn became more severe in 2009.





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