IMPLICATIONS OF THE CRISIS FOR STATISTICS:
TOWARDS AN OECD WORK PLAN

Meeting of the Committee on Statistics

to be held on 10 - 11 June 2009
at UNECE Headquarters, Geneva in Room XVIII
starting at 14h30 on the first day

For discussion under Item 2 of the Agenda.

The policy challenges emerging from the financial and economic crises may require new statistical developments or a re-orientation of existing data collections and compilations. The discussion will focus on proposals provided by the OECD Secretariat and other international organisations. The Committee is invited to comment on the statistical implications of the crisis and to provide guidance on future steps.

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Introduction

1. The implications of the financial crisis that started in the summer of 2008 are reaching well beyond the reform of the regulatory framework for financial institutions, raising questions about the balance between public and private responsibilities and between economic growth and other dimensions of countries’ progress. The crisis also questions our capacity to understand the functioning of complex economic systems and the adequacy of our statistical infrastructure to identify structural weaknesses, to value assets and to monitor performance.

2. The statistical implications of the crisis are varied. Some pertain to the triggers of the crisis, such as the collapse of housing prices and the mortgage defaults that followed. Others relate to the structural conditions of economies and financial markets at the onset of the crisis, such as the high leverage of households and financial institutions, the size and features of non-bank intermediaries, the diffusion of over-the-counter instruments and off-balance-sheet entities. Others yet relate to the monitoring of the consequences of the crisis as it unfolds, both for households (e.g. capital losses, financial distress) and for firms (e.g. access to credit, profitability). The crisis provides an opportunity to assess statistical gaps in each of these fields.

3. Several initiatives at the national and international level have been taken (or are being considered) to address the statistical implications of the crisis. Examples include the Action Plan of the European Statistical System on the accounting consequences of the financial turmoil, and the Inter-Agency Group on Economic and Financial Statistics (which gathers international organisations such as the IMF, the OECD, the World Bank, Eurostat, the European Central Bank and the Bank of International Settlements). At the OECD, the Statistics Directorate has engaged statisticians and policy analysts within the organisation and beyond, through workshops and roundtables on specific topics (e.g. on monitoring social impacts, external trade), to identify possible directions of future work.

4. This note first highlights some of the key lessons from the crisis, and then describes some of its implications in the fields of economic and financial statistics, on one side, and of social statistics, on the other. On this background, the note identifies some overarching statistical issues in terms of coverage, timeliness, micro-data availability, choice of metrics, story-telling and the shifting paradigms (from ‘economic growth’ to the broader notion of ‘sustainable and equitable well-being’). Finally, the note presents a preliminary action-plan for addressing these questions, detailing actions by both national statistical offices and by the OECD. This note aims to elicit the views of CSTAT delegates on how to move this agenda forward.

Lessons from the crisis

5. While most commentators and analysts seem to agree on the “uniqueness” (in post-war history) of the crisis that has shaken the world economy since the summer of 2008, there is not yet a fully-shared diagnosis of its nature. Without pretending to be comprehensive, some of the features that are most frequently mentioned as distinguishing the current crisis from previous episodes of financial turmoil include the following:
• First, the crisis started at the centre of the developed world, the United States, rather than at its periphery, as had been the case for previous episodes (Mexico in the early 1980s, Sweden and Japan in the early 1990s, South-East Asia and Russia in the late 1990s, Argentina in early 2000s). From the United States, financial contagion has spread rapidly to other parts of the world and to the real economy (Krugman, 2008).

• Second, the focal point of the crisis is the financial sector, and in particular that “shadow” banking sector whose importance has grown exponentially since the late 1990s beyond the reaches of the regulations and protections that apply to commercial banks (Akerlof and Shiller, 2009). These institutions supported much of their lending by issuing short-term papers, leading to large mismatches in the maturity composition of their assets and liabilities. Contagion between financial markets reflected the strategy followed by credit institutions to create large scale securities based on loans (with shares of different rights) that were then sold to other investors (Goodhart, 2008).

• Third, the crisis also reflected the existence of an over-stretched household sector, which had accumulated high amounts of debt, especially mortgages. Much of this debt build-up was based on expectations of ever-increasing housing prices. This debt allowed (through mortgage refinancing) to sustain private consumption (Kluyev and Mills, 2006), in a context characterised by stagnant income for most families and by gains concentrated at the top of the income distribution (OECD, 2008).

• Fourth, the speed with which the US financial turmoil was transmitted to other countries and to the real sector worldwide highlights the strong interconnectedness of markets and regions, making this crisis truly “global”. The crisis hence underscores that, beyond its benefits, globalisation also implies new vulnerabilities, and inadequacies of existing national policies.

6. Other factors, beyond those mentioned above, have amplified the consequences of the financial meltdown. Some of these relate to the cyclical position of OECD economies: for example, the OECD leading indicator had signalled a turnaround in US industrial production since December 2007, i.e. well before the financial bubble burst (Figure 1), implying that the recessionary tendencies associated to the financial crisis of the summer of 2007 overlapped with other cyclical factors. Others factors are linked to the policy environment: in the United States, in particular, the low interest rates (negative in real terms) that prevailed since 2001 sustained credit demand, while the large capital inflows into the US financial markets (which contributed to high liquidity) partly reflected the reluctance of Chinese authorities to revalue their currency (Altman, 2008). The distinctive feature of the current crisis is probably that all these factors have interacted with each other, leading to rapid contagion across markets (in contrast to the Savings and Loans crisis of the late 1980s, the internet bubble of 2000, and the LTCM bankruptcy in 1998). 1 While the fall in world industrial output has been, so far, more limited than during the Great Depression of 1929, the steepness of this fall remains remarkable, while the collapse of world trade has been even steeper (Fig. 2).

1 Muller (2009) uses the term ‘epistemological depression’ to refer to the “failure of the private and corporate actors to understand what they were doing”. He relates this failure to corporate beliefs that diversification and complexity would reduce risk (rather than spread contagion); to reliance on pseudo-objective criteria to judge the performance of different units within ever-more-complex institutions; and to the spreading of remuneration schemes linking executive pay to performance, which created powerful incentives to inflate corporate results. An alternative reading of the crisis is provided by Johnson (2009), who blames the financial crisis on the “grip” of financial institutions on major policy decisions in the United States, and on the belief that “what was good for Wall Street was good for the country”.
Figure 1. OECD leading indicator

OECD area

United States

Note: Shaded areas represent observed growth cycle downswings (measured from peak to trough) in the reference series (economic activity).

Source: OECD Composite Leading Indicators database.

Figure 2. Trends in world industrial output and trade in the current crisis and in the Great Depression


Box 1. How is the crisis impacting on trade flows?

The crisis has impacted international trade flows in a disproportionate way. High-frequency trade data available at the OECD (Monthly Trade Statistics and Balance of Payments databases) highlight a number of patterns. First, both the magnitude and suddenness of the fall in OECD trade values by end-2008 are unique by historical standards: during the Great Depression of 1929, trade turnover decreased much further, but the decline was more spread over time. Second, the recent collapse in trade flows reflects the strong synchronisation across countries, although the drop in trade volumes is less sharp than for values. Third, machinery and transport equipment, followed by mineral fuels, are the main contributors to the overall decline. Fourth, the decline in bilateral trade tends to be region-specific, except for the US-Asia trade relations. Last, the decline in merchandise trade is largely mirrored by the decline in service trade, with trade in services falling at the same pace as for goods in some OECD countries and at a slower pace in others. The collapse in trade flows also reflected lower creditworthiness of trade partners and financial institutions issuing “letters of credits”, which are the dominant form of financing for large trade flows: in the fourth quarter of 2008, cross-border lending and domestic lending denominated in foreign currencies declined by $1.8 trillion over the previous quarter, the largest drop since these data started being collected in 1977.
A closer monitoring of trade flows would require more detailed data. Concerning monthly trade in goods, more (cross country) comparable data on volumes, disaggregated by category of product and partner country would be needed. At the moment, data are only available by partner country or product category. Ideally, a matrix of bilateral trade by broad product categories should be produced. For trade in services, more disaggregated data are also required, notably for short-term bilateral flows. Against this background, the OECD Statistics Directorate is moving towards an almost real-time monitoring of trade flows. The quarterly Trade Press Release of April 2009 included for the first time monthly data up to February 2009. Work is underway to obtain monthly trade data at the same time of national releases and to develop a monthly ‘trade monitoring’ system.

The patterns mentioned above raise several methodological questions. In particular, they highlight the problems in using traditional trade data in a world characterised by fragmentation of production processes, close complementarities between trade and investment, and increased integration between trade in goods and trade in services. A full understanding of the driver(s) of the sharp decline in trade would require that data on vertical specialization (intermediate-goods trade, trade for processing, etc.) are matched with firm-level data, to address the issue of intra-firm trade. For example, the dataset on Trade in Intermediate Goods, recently created in the OECD Trade Directorate, does not allow detecting changing trends in trade flows by type of trade (outsourcing, global sourcing or vertical integration).

Steps in these directions are being taken with the revision of the major statistical frameworks (and classifications) to harmonize recommendations regarding the collection of international trade data - taking into account globalisation, the increasingly blurred distinction between goods and services and the need for more linkages between different statistical “families” like trade in goods and services, foreign direct investment, foreign affiliates trade statistics, business statistics, etc. However, these efforts are still at a preliminary stage.

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1. These findings draw from discussions at a recent OECD workshop on the impact of the economic crisis on trade (9 April 2009).

7. The manifestations of the crisis are also varied. Table 1 distinguishes between the various dimensions of the crisis (shown as rows in the table) which, having started as a financial crisis, has then evolved into an economic crisis and a social crisis, with effects spreading to the long term (i.e. a sustainability crisis). Each dimension of the crisis affects various sectors of society (financial institutions, non-financial firms, households and general government, shown as columns) through the channels shown as entries in the table. The different timing of these crises, and the links through which various sectors are affected, has implications for statistical work: for example, while a better monitoring of some phenomena (e.g. the relationships between financial institutions, or the assessment of their sustainability) may require new data collections and the sharing of information among supervisory-institutions beyond national borders, other phenomena may be assessed using existing (or marginally modified) tools.

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2 Morris (2007) argues that the crisis may also have geo-political implications, because of the large holdings of US dollars by official authorities and entities in other countries (e.g. Sovereign Wealth Funds).
### Table 1. Different dimensions and effects of the crisis

<table>
<thead>
<tr>
<th>Crisis area</th>
<th>Financial sector</th>
<th>Non-financial sector</th>
<th>Households</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial effects</strong></td>
<td>Losses on assets, liquidity risks, solvency risks lower securitization, lower credit rating</td>
<td>Losses in financial wealth (pensions and savings), losses in non-residential property, lower credit rating, credit crunch</td>
<td>Losses in financial wealth (pensions and savings), losses in residential property (real estate), credit crunch</td>
<td>Higher transfers to financial institutions, higher public debt, higher stakes in financial firms, easier monetary policies</td>
</tr>
<tr>
<td><strong>Economic effects</strong></td>
<td>Income losses, lower demand and profits, lower investment, higher inventories, lower foreign trade, currency runs and asset losses</td>
<td>Income losses, lower demand and profits, lower investment, higher inventories, lower foreign trade, currency runs and asset losses</td>
<td>Job losses, income losses, lower confidence, lower consumption, lower remittances, currency runs and asset losses</td>
<td>Higher public expenditure for bailouts, support to non-financial institutions and households, currency runs and related losses</td>
</tr>
<tr>
<td><strong>Social effects</strong></td>
<td>Increase in bankruptcies, lower innovation and investment, lower entrepreneurship</td>
<td>Higher poverty, loss of firm specific human capital, higher vulnerability</td>
<td>Higher social transfers</td>
<td>Higher social transfers</td>
</tr>
<tr>
<td><strong>Sustainability (long-term effects)</strong></td>
<td>Losses in economic and financial capital, lower trust and confidence, lower attention to environmental threats and green/social investment</td>
<td>Losses in economic and financial capital, lower trust and confidence, loss of firm-specific human capital, greater strains in capital/labour relations</td>
<td>Lower spending in education, lower tolerance and trust, greater social dysfunctions, lower attention to environmental threats, lower charitable donations</td>
<td>Higher public debt and bond yields, claims to reconsider mix in pension portfolios, strains on public pensions, lower infrastructure investment, less attention to environmental threats, lower foreign aid</td>
</tr>
</tbody>
</table>

Source: OECD.

8. Another important change in the way in which actors and policy makers are looking at the crisis and to the unfolding of its effects is due to the sense of vulnerability (Box 2) and the loss of trust and confidence that the crisis has brought. The recent declines in both business’ and consumers’ confidence have been exceptional and unprecedented, while the credit crunch which followed the financial turmoil largely reflected low perceived credit-worthiness of various agents. While all these aspects are intangible and difficult to measure, they are also critical to explain and interpret agents’ behaviours. Measuring these intangible manifestations of the crisis calls for a re-thinking of the way in which official statisticians interpret their role, if they want to keep their relevance.

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**Box 2. Measuring vulnerability**

The crisis is leading to a widespread sense of vulnerability among large sections of OECD populations, extending to people and households that had typically felt protected against the vagaries of the market system. Yet, despite its relevance for current discussions, the concept of “vulnerability” is not one that lends itself to easy quantifications. This partly reflects the very nature of vulnerability. First, vulnerability is multi-dimensional, referring to a wide range of risk factors (e.g. economic, personal and environmental). Second, vulnerability is scale-dependent, spanning from an individual or household to communities, regions, nations and continents. Thirdly, vulnerability is dynamic, with characteristics and driving forces that are typically changing over time.

Despite these difficulties, an operational approach to the measurement of vulnerability could be based by recognizing that vulnerability depends, first, on the prevalence and intensity of various risks that have the potential to lower the well-being of individuals; and, second, of the ability of people to cope with these risks when they occur, as shaped by the range of their assets and resources (both individual and collective) that are available. Measures of risks can be derived by looking at the frequency of various events (e.g. losing a job, divorce, or exposure to various environmental factors). Measures of means to cope can be derived by looking at the extent of the social protections available to individuals with different characteristics (e.g. the benefits available upon losing one’s job) and at the size of assets (adjusted for risk) available to each person. An example of the latter measure is presented below.
Finally, while the crisis is still unfolding, with the full range of its effects difficult to anticipate, it has already radically changed the political discourse in many OECD countries and at the global level. The greater role of the G20 summits, with the involvement of several non-OECD countries, and the re-launch of the IMF are two examples of initiatives that have the potential to lead to a new system of global governance, with consequences for the functioning of the statistical systems at the international level.

Statistical implications in specific domains

Economic and financial statistics

Financial markets and institutions

Few people would claim that the financial crisis has been caused by the absence of relevant macro-economic and financial statistics. But, without doubt, there are areas where better or more-timely information would have helped, especially in assessing the gravity of the financial turmoil and its impacts on the real economy. In particular, the crisis has raised questions on the conditions of the financial system, the transparency about its operations and the information available about risk. While some of these aspects could be tackled through more stringent accounting requirements and more information on off-balance sheet operations and special-purpose vehicles, others raise more fundamental questions. For example, at a conceptual level, it is difficult to reflect risk or exposure to risk in a national accounting framework: non-performing loans in the System of National Accounts (SNA) are measured at their full value until they are written off; similarly, contingent liabilities (such as guarantees) and other contractual arrangements that do not give rise to unconditional transactions are entirely omitted from national accounts.

Defining a risk-adjusted value for the assets and liabilities of financial institutions has been the objective of recent international accounting standards and agreements (Basel II). However, translating these definitions into SNA practice is difficult. For one, when financial assets are not traded, their valuation is based on models – whose results are more or less accurate and are not subject to a market test. Even when assets are traded, the recent experience raises questions on whether market prices are an adequate valuation standard. Theory tells us that, on average, markets are efficient, that asset prices reflect expectations about future profits and that they represent a concise summary of all relevant information. But the crisis has shaken the belief about the validity of the efficient market hypothesis, calling into question the usefulness of market valuations of financial assets and liabilities.

Similarly, while a set of factors have combined to weaken the position of financial institutions, it is questionable whether SNA data provided much light on them (Palumbo and Parker, 2009). First, SNA data did not record the full exposure of the financial sector to real estate and mortgages (beyond the long-term loans of the financial sector, mainly mortgages), as the corporate bond holdings of these institutions include a large amount of (mortgage related) structured financial products that are not identified in the accounts. Second, the aggregation of data for various segments of the financial sector showed only a moderate rise in both the leverage and the maturity mismatch between assets and liabilities (short-term debts of financial institutions, as share of their long-term credit, remained below the levels achieved in the year 2000, Figure 3). Finally, sectoral aggregation masked increased counterparty exposure, to the extent that exposure towards other financial institutions is netted out by aggregation of the SNA data.
13. To address these and other measurement issues in the financial and economic domains, an inter-agency group has been established under the chairmanship of the IMF. As a separate report on the activity of this task-force will be presented at the CSTAT meeting, this note does not elaborate further on its work. However, the following points – raised by OECD analysts and statisticians during the brainstorming organised by the Statistics Directorate in February – deserve attention:

- The lack of information about the state and functioning of financial markets was a serious problem that limited the capacity of analysts to fully understand the size and the characteristics of the financial turmoil (i.e. “information failures led to market failures”);

- “Classical” statistics (economic accounts, financial accounts, etc.), even if more timely, would not have been adequate to fully describe the conditions of financial markets and institutions. Only “market data”, typically collected and made available by private sources (i.e. Bloomberg), would have allowed identifying relevant phenomena.

- The transparency of international financial markets needs to be improved, and more detailed and timely micro-data need to be collected by supervisory authorities.

- Some statistical data on the US financial markets would have helped to identify risks and imbalances. But the “positive” message coming from market analysts and economists crowded-out the voices of those who were pointing to downside risks. Finding better ways of communicating available data, and describing the risks that these highlight, is therefore critical.

**Balance sheets, asset prices and accounts of the non-financial sectors**

14. The crisis is now affecting the real sector of the economy. Economic and financial statistics, as organised and integrated through the SNA play a critical role for assessing both the conditions and vulnerabilities of each country at the onset of the crisis, and the spreading of its effects to the real economy (through the collapse of foreign trade and lower industrial output). It would, however, be disingenuous to
believe that the SNA provides all the information needed to understand the current crisis, as policy makers and market analysts have access to a huge amount of statistics: the fundamental challenge is, typically, not lack of data but rather to identify the most relevant ones and to interpret them correctly. Nevertheless, the crisis provides an opportunity to assess whether the current structure of SNA is fully able to provide relevant data. In this respect, it is useful to distinguish between the content of the System (as defined in 1993), the frequency of data collection and the timeliness with which the data become available.

15. On the content side, some of the current limitations are well illustrated by SNA data on the financial position of households for the United States. These data highlight the interplay of the various factors underlying the build-up of household debt in the United States. Households moved from a net lender to net borrower position in the mid-1990s (left-hand panel of Figure 4), due to higher physical investment and lower savings. However, the impact of this higher debt on household balance sheet was muted because of the (equally large) revaluations of household assets. Household net worth (as percentage of household income) remained at comfortable levels until 2006, declining since then due to lower house and stocks prices (right-hand panel of Figure 4). Holdings of liquid assets such as deposits, credit market instruments and other non-equity assets still exceeded the value of outstanding liabilities, at least on average, in 2008. From this perspective, the accumulation of household debt could have appeared as ‘normal’, as any judgement on the sustainability of this development would have required assessing the vulnerability of household balance sheets under different scenarios for asset-prices. Aggregate SNA data obviously failed to uncover the extent to which a large number of households were facing risks of negative equity (i.e. a value of outstanding mortgages in excess of that of their residence) in the event of small declines in house prices: when this risk did materialise, most of these households sold their houses, rather than trying to meet their debt obligations, which led to further declines in house prices. These vulnerabilities cannot obviously be gleaned based on SNA data for the household sector as a whole.

![Figure 4. Net lending, revaluations and balance sheet of the household sector, United States](image)

Source: OECD Financial Statistics.

16. The implications of these lessons are clear: data on financial and non-financial accounts for various sectors are still missing for many countries and are produced with very large delays. Special efforts should hence be devoted to developing quarterly financial and non-financial accounts for all sectors within a reasonable delay. If available data do not allow the development of a full set of accounts,

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3 Full sets of quarterly account data for all institutional sectors are available for the United States and the Euro area.
flash estimates of key variables should be produced. Moreover, the communication of these data should be much more prominent than today, with special efforts to educate journalists to pay attention to and understand these data. Because of the complexity of these accounts, statisticians should develop some key indicators highlighting changes in the position of each sector.

**Social statistics**

17. As the crisis unfolds, its social impacts are becoming more evident. While the financial crisis took analysts and statisticians by surprise, and the economic crisis can be adequately monitored with existing tools, it is urgent to evaluate what actions are needed to enhance our capacity to monitor these social impacts. A crisis, especially if long and deep, can change the social conditions of people in a short period of time while, conversely, a long period may be needed to unwind its effects. Current developments are putting stress on the whole system of social statistics, largely built on the assumption that social change happens slowly and can be monitored through low-frequency household surveys.

**Statistics on household income**

18. The first area where existing tools appear unable to respond to users’ needs is that of monitoring trends in poverty and income inequality. The patterns highlighted by statistics on household income over the last few years are often quoted as one of reasons for the fragility of the economic system. Since the early-2000s, several OECD countries experienced a concentration of income growth at the top of the distribution, with poorer and middle-class households falling behind (OECD, 2008). Many of these households, at least in some OECD countries, sustained their consumption and living standards through debt. While this debt may be partly related to the liberalisation of financial markets, and to the lifting of credit constraints that had previously applied, it also reflected a failure by households to fully understand their perspective obligations and the risks inherent in asset price developments.

19. The attention paid to income inequalities is not fading away as the crisis unfolds, as witnessed by public scrutiny surrounding corporate pay in industrial firms and financial institutions that are downsizing or benefitting from public support. It is difficult to say, a priori, how income inequalities will develop in the near future. Capital gains and losses, which represent the most direct channel through which the financial crisis affects households, are mainly concentrated among the very rich, but they are also rarely included in income definitions. Conversely, as the effects of the financial crisis are transmitted to the real economy, job losses, lower working hours and earnings are impairing the living conditions of many families, at the same time as welfare programmes come under stress because of higher numbers of benefit claimants, lower revenues and higher outlays for financial-rescue packages. In any case, it would be wrong to draw much comfort from lower income inequalities (if these were to materialise) when they result from income losses that are smaller at the bottom of the distribution than at the top: changes in absolute income also matter for living conditions, and this both in years of economic expansion and in years of recession.

20. Unfortunately, answers to all of these questions about the impact of the crisis on income distribution will have to wait for many years: several OECD countries still lack annual surveys on income distribution and, even for those who do, the time required for processing and editing the survey results lead to long delays before these data enter public discussions.

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4 The 2001 Canberra Manual on the measurement of household income recommended their exclusion.

5 Among the sources that are used for the OECD income distribution questionnaire, data are available every year for most countries but every two years in Italy and Mexico, every three years in Japan and every five years in Korea and Turkey. Most surveys ask about income in the year preceding the fieldwork, with results available 1 or more years later (e.g. for the United States, data on income in 2007 become available
Looking beyond income: household wealth

21. Beyond income, the crisis is focusing attention on wealth as a key determinant of people’s living standards. The effects of changes in household wealth are differentiated among groups and individuals. While the collapse of the stock market has hurt the wealthy, it is also affecting retirees and workers approaching retirement, whose pensions are paid by private institutions exposed to market losses. Similarly, lower house prices are hitting middle-class families, and reducing their ability to borrow against home-equity (Brandolini et al., 2009).

22. Capturing these effects requires information on the distribution of household wealth. While limits in this field are daunting (due to differences across countries in survey’s coverage, methodologies and valuation approaches) the available data sheds some light on households’ vulnerability. Beyond those counted as poor in terms of income, a much larger number of people have insufficient liquid assets (i.e. financial instruments that can be easily monetised, net of financial liabilities) to secure ‘adequate’ consumption (where ‘adequate’ is defined as corresponding to three months of poverty-level consumption, based on a threshold of half of median annual disposable income, left-hand side of Figure 5). Similarly, many European households have arrears on different types of debts (rents, consumer loans, mortgages and utility bills, right-hand panel of Figure 5), with significant differences across countries and debt instruments. Both types of indicators provide useful information on the concentration of vulnerabilities among households with specific characteristics.

Figure 5. Indicators of household conditions based on holdings of assets and liabilities

<table>
<thead>
<tr>
<th>Liquid-asset poor, early 2000s</th>
<th>Share of households in arrears, 2005 (?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>ITA</td>
</tr>
<tr>
<td>USA</td>
<td>IRL</td>
</tr>
<tr>
<td>GER</td>
<td>FRA</td>
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<tr>
<td>FIN</td>
<td>FIN</td>
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<td>UKG</td>
<td>UKG</td>
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<tr>
<td>SWE</td>
<td>ESP</td>
</tr>
<tr>
<td>NOR</td>
<td>NLD</td>
</tr>
<tr>
<td>ITA</td>
<td>Utility bills</td>
</tr>
<tr>
<td>AUT</td>
<td>Consumer loan</td>
</tr>
<tr>
<td></td>
<td>Rent</td>
</tr>
<tr>
<td></td>
<td>Mortgages</td>
</tr>
</tbody>
</table>

Source: Brandolini et al. (2009)

in the course of 2009). Since 2005, all EU countries (as well as Norway and Iceland since 2005, and Switzerland, and Turkey since 2007) participate to the EU-SILC annual survey-programme: while this represent an improvement (although posing a challenge in terms of assessing changes over time, due to the discontinuity of previous surveys), timeliness of data remains an issue (e.g. EU-Silc income data for 2007 become available in December 2009).
UN Monitoring social conditions: towards a “social watch” system

23. Unfortunately, the limits of social statistics go well beyond the lack of timely data on income and wealth distribution, and these limits become more glaring as the crisis shifts the focus of policy discussions from the financial sector to the conditions of people. Social statistics are poorly tailored to track short-term developments due to infrequent data collections and long processing time. These limits are important obstacles to the efforts by individual countries and international organisations to set up a “social watch” for the continuous monitoring of social conditions. In March 2009, the OECD organised a round-table with several experts from academia, international organisations and statistical offices to discuss proposals to address these shortcomings and limitations. The conclusion was quite clear: despite these limits, opportunities for better using social statistics for monitoring the impacts of the crisis exist, and include:

- Making better use of administrative data on the number of people claiming various types of benefits. In some countries, data from administrative registers are available with short delays and they provide good early-information on trends in poverty headcounts (e.g. recipients of Food Stamps in the United States). Information from administrative sources may also allow tracking the number of housing re-possessions, non-performing loans and over-indebted households.

- Using information available from monthly and quarterly labour force surveys on various measures of labour market slack (e.g. unemployment, discouraged workers, involuntary part-timers), working hours and earnings, and exploring the possibility to include in these surveys simple questions of income and material conditions.

- Using information from consumer sentiment surveys (which are conducted every month or quarter, and that typically include questions on households’ own financial conditions) and expanding these surveys to include a broader range of questions (e.g. on material deprivation). Steps could also be taken to extend to other countries some of the innovative approaches developed outside the boundaries of the official statistical systems, such as the daily monitoring of household conditions available for the United States through the Gallup Daily Pool (Figure 6).

6 Initiatives in this direction are being considered both by individual countries (e.g. the Observatoire national sur la pauvreté et l’exclusion sociale in France is taking steps to create a system of “alert indicators” that would combine use of existing data, surveys of social workers, and focus groups of poor people) and internationally (e.g., at the EU level, the first “Joint Assessment of the Social Impact of the Economic Crisis and of Policy Responses” by the Social Protection Committee and the European Union.

7 See the contributions prepared for the OECD Roundtable on “Monitoring the effects of the Financial Crisis on Vulnerable Groups of Society”, available at www.oecd.org/els/social/crisisroundtable, and in particular Nolan (2009).
Figure 6. Daily tracking of social conditions in the United States

Three-day rolling average

Share of respondents saying that they standard of living is getting better versus those saying it is getting worse

Share of respondents classifying their life (on a ladder from 0 to 10) both now and five years from now

Source: Gallup Daily Polls (23/2/09).

Key statistical challenges

Most of the statistical challenges raised by the crisis are specific to each of the fields considered above. However, some cross-cutting themes can be singled out.

- **Coverage.** The crisis has uncovered a range of domains where statistical information is importantly limited. In the financial field, the information currently available on balance sheets and asset prices is inadequate to assess the sustainability of debt accumulation, in particular with respect to those sectors (households and financial corporations) where the crisis originated.8 Important gaps also exist for social statistics on household own conditions.

- **Timeliness.** The crisis raises questions on the balance between timeliness and accuracy of data. In most OECD countries, time lags in the availability of financial statistics (flows of funds and balance sheets by sectors) exceed two years. Lags are even longer for household surveys on income and wealth, and for information on some economic fundamentals (e.g. productivity, enterprise creation and job flows). While reducing these time lags could only be achieved through additional investments (unlikely to materialise, in the context of budgetary stringency confronting NSOs in most countries) steps could be taken to ease the trade-off between timeliness and accuracy by developing early-estimates of some key variables for monitoring the crisis, by including specific questions in large-scale household surveys, and by redesigning surveys (especially social ones) to deliver results shortly after completion of the fieldwork.

- **Access to micro-data.** Much of our statistical systems, along with the communication based on them, rely on measures of central tendency (means). It is clear, however, that considering the full distribution for a range of key economic variables would have allowed identifying risks in parts of the system, whose effects then spread to the whole economy and society.9 More importantly,

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8 The paucity of financial information for these sectors stands in sharp contrast to the huge investments made in recent years to develop comprehensive information on government debt.

9 As already noted, if the balance sheet of the household sector may not have highlighted an obviously “unsustainable” build-up of debts, the large number of household with negative equity implied risks of
better access to micro-data would allow better managing of the consequences of the crisis as it unfolds, effects that differ across people, firms and regions. This raises the issue of how to measure heterogeneity when underlying distributions are skewed.

- **Developments of alternative metrics.** A further theme raised by the crisis is the role of market prices in economic accounts. While some of the limits in the capacity of markets to price assets have already been evoked above, questions about the use of market prices extend to economic production. Market prices are the foundation of economic statistics because, under a number of assumptions, marginal valuations of agents lead to market equilibrium and social optimum. In reality, these assumptions do not always hold, and much of the growth in GDP in recent years has reflected the growth of sectors (e.g. financial services, insurance and health care) where the application of these assumptions is especially problematic. While in some domains statisticians have recognised the limits of market prices and developed alternative metrics (e.g. the use of Purchasing Power Parities, rather than market exchange rates, for cross-country comparisons of GDP), research on alternative valuation systems remains limited in other domains.

- **Story-telling.** Some of the participants to the various brainstorming sessions organised by the OECD in the aftermath of the crisis expressed the sentiment that some of the warning signs of the financial crisis were not picked up partly because of a reluctance by statisticians in commenting on the patterns uncovered by their data, and of the rigid demarcation between data production (delegated to statisticians) and interpretation (delegated to analysts). While some steps in recent years have moved statistical work beyond the presentation of data to include commentary and “story telling”, this sentiment suggests that further steps should be taken in this direction. This is especially important for monitoring short-term developments.¹⁰

- **Shifting paradigms: from economic growth to sustainable and equitable well-being.** More generally, the crisis gives salience to concerns about the role attributed to GDP growth as the primary compass for collective action and policy making, and on the narrowness of the notion of “sustainability” embedded in most economic discussions. It may indeed be argued that, beyond concerns about the sustainability of public debt, the evolution of private debt – as well as of the debt that we build up against the environment and our communities, by depleting natural and social capital – is also an essential criterion for sustainability. The statistical implications of the crisis are at the heart of the work of the French “Commission on the Measurement of Economic Performance and Social Progress” and of the OECD-hosted “Global Project on the Measurement of the Progress of Society”, whose highlights are described in other papers for this meeting.

**Actions**

25. Several initiatives by national and international organisations are being taken to improve statistics in various fields. Within the OECD, brainstorming meetings between statisticians and policy analysts and roundtables focused on specific domains have allowed identification of some of the options available. These relate to actions that should be taken by both statistical offices in individual countries and by the OECD.

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¹⁰ Steps in this direction are, however, being taken, both within the OECD and outside. With respect to the first, short narratives on consumer confidence and on productivity trends have been posted on the OECD crisis website (http://www.oecd.org/document/24/0,3343,en_2649_201185_41707672_1_1_1_1,00.html ). With respect to the latter, a first “Joint Assessment of the Social Impact of the Economic Crisis and of Policy responses” was released at the EU level.
Actions for national statistical offices

26. The above discussion points to areas where statistical offices could improve their data collection and dissemination systems to better anticipate and monitor the unfolding of the crisis. Recognising that in some cases progress could be made quickly, while others may produce results in the medium-term, the following points appear particularly important:

- Collecting more comprehensive and timely information on asset prices and balance sheets for various institutional sectors.
- Developing quarterly accounts for key macroeconomic variables by institutional sector.
- Implementing population and economic censuses over 2010-2011 and use results to calibrate national accounts (critical for countries where “benchmarking” is carried out every ten years).
- Compiling more timely surveys on household income and wealth, in order to assess changes in distributions as well as in relative and absolute poverty measures.
- Going beyond definitions of poverty based on household income alone, through development of “multidimensional” measures.
- Exploring the possibility of re-organising social surveys (for example, following the example of labour force continuous surveys) towards a “modular” approach, able to provide key results on relevant policy issues with a short delay.
- Speeding up the necessary adjustments to standards for trade-data collection and processing, and developing better indicators of globalisation and changes in the “value chain”.
- Making better use of administrative data to monitor social phenomena, especially those who can shed light on the vulnerability of specific population groups.
- Improving timeliness of data from surveys and national accounts, assessing consequences on accuracy, and monitoring through revision analyses based on OECD/ Eurostat guidelines and tools such as the software developed and made available by the OECD.
- Improving communication about key trends and “news” emerging from data, paying more attention to story-telling.

27. Some of these actions require a strong commitment at the political level to provide funds to improve the existing statistical systems. Particularly urgent are improvements in the fields of social statistics. To raise policy-makers’ awareness about the need to invest in further developing national statistical systems, especially for social statistics, the OECD is planning to include this issue in the future meetings of several policy committees and of the forthcoming Ministerial meeting (June).

Actions for the OECD

28. Beside the actions to be taken by individual countries, some additional actions could, and should, be taken at the international level. In this case, a good co-operation has to be established between international organisations to avoid duplication of efforts. To ensure co-ordination with the OECD, a “Horizontal Group on Statistics for Financial, Economic and Social Crises” (HG) has been created, with
the participation of all relevant directorates and under the chairmanship of the Chief Statistician. The following sections benefit from the input received so far from the HG. These actions can be grouped under the two headings of improving dissemination and communication of existing data and expanding data availability. It has to be underlined that, due to budget constraints, not all these activities could be carried out without additional resources. CSTAT guidance is therefore welcomed to establish priorities.

**Improving dissemination and communication of existing data**

29. Steps in this field have / could include the following:

- Considering the high pressure coming from users to access OECD data, and to avoid possible criticisms of the Organisation, the Chief Statistician has contacted all Directorates to evaluate opportunities to speed up the release of data relevant for the analysis of the crisis (especially those coming from elaborations made by the OECD Secretariat). For example, despite the late release foreseen for the 2009 *OECD Employment Outlook* (in October, at the time of the OECD Labour Ministerial meeting, as compared to the usual date of June), the concerned Directorate has agreed to release the Statistical Annex of this publication according to the usual timetable.

- Some of the key statistics on the crisis available throughout the Organisation could be disseminated in a “Special Focus” for the 2010 edition of the *OECD Factbook*. A choice to move in this direction would not be without consequences. First, the *Factbook* has, so far, traditionally relied on annual data: providing an up-to-date assessment will require, when possible, use of infra-annual data in various domains. Second, the focus of the *Factbook* on long-term development will require describing the crisis based on a medium-term framework. A final decision on this subject will be taken by the OECD “Statistical Policy Group” before the summer.

- A web page with statistical data on the crisis has been created on the OECD Web Site. What is currently missing is a fuller “narrative” helping users to identify the different stages of the crisis, as its unfolding affect different population groups and sectors. The OECD Statistics Directorate is planning to develop a much richer site, using Table 1 of this paper as a tool to present key OECD data concerning the different aspects of the crisis and regularly updated. Data could also be presented using innovative visualisation tools, currently developed at the OECD and elsewhere.

- In some cases, special efforts have been asked to NSOs to accelerate delivery of summary data to the OECD. These efforts have allowed the publication of timely data for G7 countries (referring to the first quarter of 2009) in the April press releases. More generally, the Secretariat will look at the

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11 The aims of the Horizontal Group are: i) to discuss the most appropriate actions to be undertaken (in the short and medium term) to improve the production and dissemination of relevant and timely statistics for monitoring the current crisis; ii) to identify external private data sources whose acquisition would improve the OECD capacity of analysing financial, economic and social phenomena; iii) to contribute to the preparation, and oversee implementation, of this report to CSTAT; iv) to develop a proposal for a special chapter of the Factbook 2010 devoted to describing the key features of the crisis; and v) to identify ways to speed up the release of statistics especially relevant for monitoring the crisis.

12 Delivering such a chapter will also require developing a “narrative” of the most salient features of the crisis, and selecting the most appropriate data supporting it. It would also require organising the data into key domains, such as financial conditions and asset prices; economic and industrial activity; foreign trade and external debt; labour market impacts; social conditions; and policy responses. This exercise will require the use of both data already at hand and others that, while available, are not currently collected. This exercise could also allow identifying some of the most glaring gaps in the information currently available at the OECD.
possibility of issuing additional press releases, or expanding existing ones, to cover relevant data for the monitoring of the economic and social crisis (for example, about employment).

Expanding data availability

30. The OECD Statistics Directorate is also considering the possibility of collecting key aggregates from quarterly national accounts for the Euro Area, the United States and a few other countries. In particular, the Secretariat proposes to collect/present information on a set of variables referring to the household sector from national accounts and other domains. In some cases, these data are already available in-house, but have not so far been brought together in a consistent way. These could include the following:

- **Compensation of employees and nominal disposable income (quarterly).** Wage income constitutes the most important source of income for households. But property and self-employment income, as well as taxes paid and transfer payments received, also matter for their economic well-being. This will lead to time series of compensation of employees and nominal household disposable income, total and per capita.

- **Real adjusted household disposable income (quarterly).** What counts for living standards is real, not nominal, income; further, beyond cash income, public transfers in kind (such as education and health) should be accounted for. This indicator will track the evolution of real adjusted disposable income per capita or per consumption unit (i.e. after adjusting for changes in household size), deflated by the implicit price index of actual individual consumption.

- **Savings and investment (quarterly).** Given income, households decide whether to save, spend on consumption items, or purchase capital goods. Time-series data on net savings (as a share of household disposable income), non-financial investments (essentially dwellings), and net borrowing (or lending) position of households will help to better understand households’ behaviour.

- **Acquisition and disposal of financial assets (quarterly or annually).** When households’ savings exceed their investments (i.e. they are net lender to the rest of the economy) they acquire financial assets, and the opposite applies (i.e. they dispose of their financial assets) when they are net borrower. Time-series showing the composition of net acquisitions of financial assets, classified by types, would provide a picture of the structure of households’ acquisition and disposal of financial assets, and to assess the riskiness of their engagements.

- **Revaluation and balance sheets (quarterly or annually).** Households make gains or suffer losses on their holdings of financial and non-financial assets. These revaluations, as well as their acquisition or disposal of financial assets, lead to changes in their balance sheets. Time-series on both revaluation gains and the balance sheet (assets, liabilities, net worth) of the household sector will allow monitoring of the sustainability of their position with respect to changes in asset prices.

31. Work along the lines mentioned above correspond to the strands of work that the OECD is pursuing in the context of the Inter-Agency Group on Economic and Financial Statistics. Other initiatives to expand data availability could be foreseen beyond households. In particular, it would be worth exploring the possibility to:
• introduce a greater breakdown for various financial instruments and financial intermediaries in financial accounts. This could include grouping instruments by their risk and developing different metrics (beyond current prices) for valuing assets and liabilities.

• produce early estimates of some important indicators (for example, productivity, for which the data on 2007 have been published in April 2009) and compiling flash estimates of world aggregates for key short-term economic variables. These flash estimates of world aggregates should use as much as possible data already collected for OECD countries, accession countries and key non-member economies, which represent a large part of the world production and trade. In this context, the OECD Statistics Directorate has started a project to assist the Chinese National Bureau of Statistics in compiling quarterly GDP according to international standards: first results are expected by early 2010.

• gather a more comprehensive set of social statistics for monitoring purposes. Following the conclusions of the G8 social summit (Rome, 29-31 March 2009), which encourages “international organisations to work together to develop comprehensive indicators that help monitor the connections between social and economic policies”, the main proposals would be to proceed to rolling updates of income distribution data; to compile alternative measures of labour market slack, hours worked and earning from labour force statistics; and to gather indicators of financial conditions of households based on monthly consumer surveys. As far as the international co-ordination of initiatives in this field is concerned, the OECD proposes the establishment of an Inter Agency Task Force on social statistics to monitor the crisis, mirroring the initiative taken for financial and economic statistics, with the participation of the European Commission, the World Bank and other interested organisations.

Conclusions

32. The Committee on Statistics is invited to:

• NOTE the document and action plan presented by the Secretariat;

• COMMENT on the statistical implications of the crisis;

• PROVIDE guidance on the next steps to be taken by the OECD.

33. It is proposed that a revised action plan be prepared before the end of the year, building on the conclusions of the discussion at the CSTAT meeting as well as on-going consultations with other OECD committees, and in light of availability of resources. The Secretariat will regularly report on the implementation of this plan to CSTAT.

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13 A pilot project on this second stand of research will be launched in the summer, in co-operation with the Bank of Italy and a group of researchers.

14 Data on income distribution, based on a variety of classifications by income sources and individual and household characteristics, are currently collected by the OECD infrequently. It would be possible to envisage a more frequent collection for a subset of the tables/indicators.
REFERENCES


