

# SIGMA

The bulletin of European statistics

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## STATISTICS AND ...



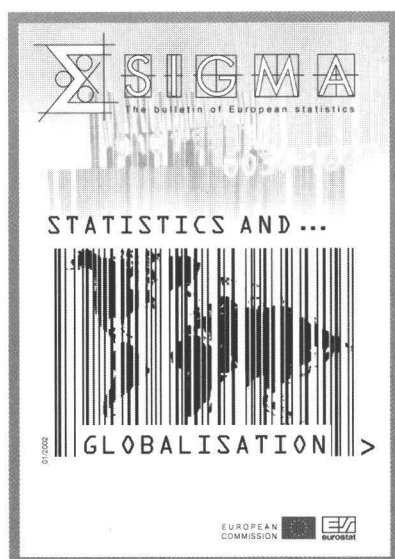
## GLOBALISATION >

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## In this issue of Sigma ...

Distances are shrinking and barriers are vanishing. Be it goods, people, ideas, culture, news or even pollution – you name it – borders are becoming increasingly porous. Changes in supply and demand in one country can send ripples around the world. News of an event in a country thousands of kilometres away can reach us before their own people get wind of it. In short, we live in a globalised world. Yet we still perceive and interpret our world in national terms.

High-level international meetings such as those in Seattle, Prague, Gothenburg and Genoa have prompted many people to take a closer look at the ties holding the world together and to rethink the merits of this force called globalisation. What better moment then to scrutinise the subject with *Sigma* readers ...

- in the light of EU policy,
- from the perspective of a key global actor, and above all
- in terms of its impact on statistics.

Eurostat's Director-General **Yves Franchet** opens this issue before giving the floor to the European Commissioners **Pascal Lamy** (Trade) and **Erkki Liikanen** (Information society) whose remits are key elements in the globalisation process.

MEP Dr **Paul Rübig** highlights that globalisation policies need to be democratically legitimised, while **Françoise Le Bail** of DG Trade points to the role of statistics and the statistical needs of a major user.

Next, statistics specialists from Eurostat, Istat, ITPS (the Swedish Institute for Growth Policy Studies), and the OECD's Chief Statistician, **Enrico Giovannini**, discuss the various statistical challenges raised by globalisation.

## Also in this issue ...

With eight Eastern European countries plus Malta and Cyprus ready to join the EU in the next wave of enlargement, and more countries waiting in the wings, we felt it was high time to become familiar with the statistical systems of our future EU partners. We therefore kick off a new series of profiles, with **Poland** and the **Czech Republic** first out of the hat.

Focusing on the millennium census round, we then report on the experience of **Norway** and **Hungary** in this exercise.

**Heli Jeskanen-Sundström**, Director-General of Statistics Finland, reflects on strategies for the statistics of tomorrow, while **Kerstin Forssén** of

Statistics Sweden presents a strategy for intermodal transport statistics.

INSEE's **André De Los Santos** tells us how they are making statistics more accessible for the public, before **Statistics Switzerland** gives us the low-down on some 'personnel news'.

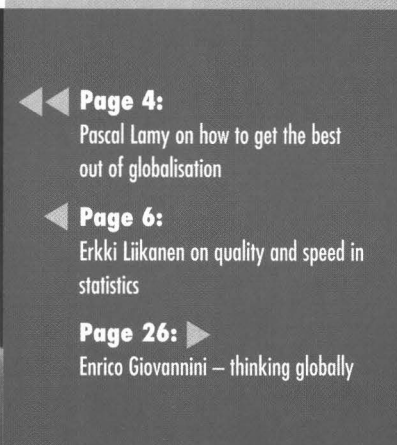
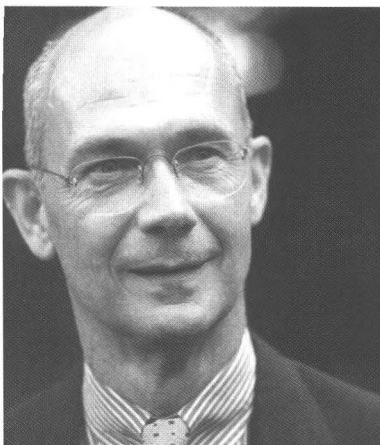
Finally, we unveil how the EU is trying to catch up with 'Uncle Sam' in short-term statistics, and wrap up the issue with some information about the new Community Statistical Programme for 2003-2007.

**Philippe Bautier**  
Assistant chief editor

We would like to **thank** all those who have contributed to this edition:

Winfried Blaschke, Marie Bohatá, Edouard Bourcieu, Adelheid Bürgi-Schmelz, François de Geuser, Olivier De-Laroussilhe, André De Los Santos, Barbara Domaszewicz, Kerstin Forssén, Enrico Giovannini, Armin Grossenbacher, Gallo Gueye, Gustav Haraldsen, Coen Hendriks, Beata Jakubczak, Heli Jeskanen-Sundström, Bettina Knauth, Aarno Laihonon, Françoise Le Bail, Denis Leythienne, Patrick Low, Arto Luhtio, Irène Martin-Houlgatte, Jussi Melkas, Enrica Morganti, Paolo Passerini, Jean-Claude Roman, Gábor Rózsa, Paul Rübig, Heikki Salmi, Paul Inge Severeide, Anne-Christine Strandell, Stanislav Stygler, Tadeusz Toczynski, James Whitworth



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Fons Theis changes horizons

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Bettina Knauth explains FATS

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Introducing Adelheid Bürgi-Schmelz

## Our news

**Fons Theis**, who has substantially shaped the character and look of *Sigma* over the past six years, waved farewell to Eurostat at the beginning of this year. But he is only a short walk away in his new job as Director of the European Commission Representation in Luxembourg – a function that he had already held from 1990 to 1995 before getting into the driving seat of information and communication at Eurostat.

**Philippe Bautier**, at Eurostat since 1990 and in the Press Office since 1999, takes the baton from Fons Theis. His goal: continue to make *Sigma* the ideal companion for understanding what's going on in the European Statistical System, from statistical themes to the movers and shakers. With the challenges of enlargement, globalisation and questions of global governance, new technologies, short-term statistics, to name a handful, there will be no difficulty making *Sigma* an interesting read in the years to come. *The rest of the Sigma team welcomes him.*

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# Statistics go global

**H**ardly a day goes past without globalisation issues in the news. Yet, not all the references are glowingly positive. What is seen as an opportunity by some, is perceived as a threat by others. However, what unites both sides is the conclusion that globalisation exists and that it matters – that it matters for everybody, be it governments, economic actors or individuals. And it also matters for statisticians who will need to adapt their production systems to this new phenomenon.

But what is exactly meant by globalisation? Just like the term 'new economy', 'globalisation' is used to describe an important structural change in the world's economies for which it is difficult to agree on a definition sufficiently exact to please a statistician.

It is the shorthand expression for a bundle of phenomena that result from the opening of markets and lead to a considerable increase in the level of integration and interrelation of national economies. In this respect, the process of EU integration can be seen as an example of globalisation on a reduced scale. The process of globalisation has currently been accelerated by the political will to liberalise markets and facilitated by the availability of powerful information and communication technologies that enable communication beyond the boundaries of space and time.

## Challenges for statistics ...

The structural change described by the term 'glob-

alisation' impacts on many areas of our lives. Hence, it is legitimate for policy-makers to call for statistics that help them formulate policies in the light of globalisation. But globalisation is not only a phenomenon to be measured in its own right; it is also a phenomenon that will influence the statistical system itself, where it might induce similar structural changes as in our economies and societies.

## Meaningful statistics about globalisation

Initially, the appearance of a new policy-relevant phenomenon simply calls for its measurement in statistical terms. As far as globalisation is concerned, its measurement can rely on a number of existing approaches that have formed part of the statistical apparatus for many years. The extent of globalisation can thus be determined by statistics relating to external trade, foreign direct investment as well as business statistics. The contribution from Enrica Morganti and the four contributions from Eurostat colleagues describe the different angles of globalisation that standard statistical tools can address.

To fulfil this new aim of capturing the globalisation process adequately, these tools are currently in the process of being adapted and refined. And more work lies ahead to respond to further requests from users, such as the need for statistics on services and on the modalities of international integration, two areas of concern for Françoise Le Bail or

the need for statistics on the role of SMEs, a subject that Dr Paul Rübig picks up in his interview.

The chief challenge in this respect, however, is integrating these different statistical areas, which have developed side by side for many years, each with their own logic. The new common aim of contributing to the joint measurement of globalisation suddenly turns those initially distinct areas into related areas of statistics. And this creates a need for common concepts, definitions and nomenclatures for drawing up a consistent statistical portrait of globalisation. This need for integration will require significant coordination that will not leave the original areas unaffected.

Beyond the measurement of the extent of globalisation lies the analysis of its impact – carried out by researchers all over the world (see also the article by Anne-Christine Strandell). It will be up to the dialogue with this research community to further refine the need for basic statistics that are able to contribute to the analysis of the globalisation process.

## Meaningful statistics despite globalisation

The measurement of globalisation is only one of the impacts of globalisation on statistics. A far more important one stems from the fact that increasing globalisation will call into question the relevance of statistics that represent a reality truncated by national borders. At a time when enterprises think and

act globally, statisticians will be asked to do the same. This challenge, which hits the current system of statistical reporting at its heart, has the potential of inducing a paradigm shift for statistical reporting.

A first step might be a move from a statistical reporting system based on enterprises or even smaller units to one based on larger units such as enterprise groups and, in particular, trans-national enterprise groups – important actors in the globalisation process.

Next, the relevance of the principle of residence as opposed to nationality could be brought into question. Can reporting on international transactions continue to be based on the principle of residence in the light of transfer pricing used in intra-firm trade? And what about statistics on growth and productivity in the light of production processes split across different countries? Or as a general question: Do we need to change the current statistical output due to the bias generated by globalisation?

All these questions call for more dialogue with existing users to determine what would constitute meaningful statistics despite globalisation.

## Globalised statistics?

The paradigm shift is likely to go even further and has the potential of giving a new meaning to the term 'EU statistics'. When national allocation of data

becomes meaningless, EU statistics obtain a value in their own right, over and above an aggregation of national data. This will not only necessitate increased efforts concerning consolidation, but will give a new role to Eurostat.

When the phenomena under observation are international in nature, the corresponding statistical system is best located at an international level. When individual Member States have only a partial view of the reality, we obviously need an intrinsically international approach. It is therefore not surprising to hear calls for the establishment of a business register of European enterprise groups, nor demands for Eurostat to collect data on enterprise groups directly.

### ... and opportunities

Clearly, globalisation throws up a great many challenges for statisticians. But these challenges also offer a host of opportunities for the European Statistical System and its members to seize.

As the statistical measurement of globalisation is in its infancy in most Member States, the joint development of concepts, definitions, nomenclatures and data collection tools provides an opportunity for fruitful collaboration within the European Statistical System.

Moreover, since the phenomena under observation are essentially international in nature, there is further scope for developing the European Statistical System through joint projects. As those joint projects are likely to require not only the col-

laboration of different actors, but also the exchange of their data, concerns about statistical confidentiality will take the spotlight again. The need for meaningful statistics about globalisation and despite

The changes brought about by globalisation are likely to lead to a call for extended collaboration and harmonisation beyond the boundaries of the European Union. Thus, Eurostat's current efforts in building a wider

alised statistics. And as far as other international actors agree (see the interview with Enrico Giovannini), this dream may well come true.

All in all, we could see globalisation as a blessing in dis-



*"The measurement of globalisation is only one of the impacts of globalisation on statistics."*

globalisation should feed into the discussion about the significance of statistical confidentiality and of acknowledging the privileged role of statisticians in the use of confidential data – even across borders.

statistical system in collaboration with other international actors and, in particular, with the OECD and the United Nations will receive more impetus and have the potential of resulting – one day – in a system of glob-

guise, providing a catalyst for ushering in a statistical system fit for the third millennium.

**Yves Franchet**  
Director-General  
Eurostat



Trade has been a key pillar in the EU since the Community's first foundations were cemented into place. And with globalisation rapidly penetrating almost every nook and cranny of our lives, it continues to stand high on the horizon. As the Commissioner for trade, **PASCAL LAMY** has the task of carving a place for EU trade policy in the world trade architecture. He answers *Sigma's* questions ...

# Getting the best out of globalisation

**T**he buzzword 'globalisation' is tripping off tongues everywhere. Although there is nothing new about this phenomenon, it is increasingly dominating public discussion. What is it really about?

Globalisation refers to the process of world-wide integration of markets, through the increasing volume and variety of cross-border transactions in goods and services and of international capital flows, and through the more rapid and widespread diffusion of technology and ideas. It is mainly driven by technology and by the actions of individual economic actors.

Although it is true that this is not a new phenomenon – for instance, at the beginning of the 20<sup>th</sup> century the world was already highly integrated in terms of trade and investment levels – the depth of integration today and the rapidity of its evolution, is quite unique.

Globalisation has acted as a powerful factor for enhancing global welfare through efficiency gains (better allocation of resources) arising from access to foreign capital, technology transfer, greater international

specialisation and competition. The continued process of globalisation has prompted cost reductions, rising levels of productivity, and greater consumer choice. The process has also provided a major driving force behind the economic growth that has raised living standards across the world.

Since 1960, world trade has increased fifteen-fold and the per capita incomes of the world's population have doubled. Over the past decade, trade has increased twice as fast as output, FDI three times as fast and cross-border trade in shares ten times as fast.

## Striking the balance

*Why is globalisation perceived as something threatening? Have our politicians been focussing too much on economic aspects? What conclusions has the Commission drawn from the backlash against globalisation?*

The trend towards increasing international interdependence is generating not only winners but also losers, as the capability of countries and of individuals to exploit the opportunities provided by globalisation differs. The popular backlash

against globalisation/liberalisation – which rarely distinguishes between these two concepts – is mainly based on considerations that globalisation implies raising inequalities and environmental risks as well as on concerns about a race to the bottom as far as social protection standards are concerned.

Economic growth and rising prosperity have been particularly marked in those countries whose economic policies have been geared towards greater interaction in the global economy. In recent years, some East Asian economies have enjoyed double-digit rates of growth in merchandise trade and equivalently high levels of output growth. However, others – sub-Saharan Africa, in particular – have fared less well.

As illustrated by the fact that foreign direct investment (FDI) flows only to a limited number of countries, 'globalisation' is in fact not a 'global' phenomenon: interdependence is growing only between certain regions/countries, with others being left out because they cannot muster the degree of sophistication and good governance necessary for integration into the world economy. GDP growth does not equal develop-

ment, if it is not translated into investments in infrastructure, education, etc., which will themselves create the basis for sustainable development.

In fact, there is a growing realisation that if globalisation is to support sustainable development, it must strike a balance between the three inter-related objectives of stable economic growth, social development and environmental protection. This is a key policy objective for the Commission, in both our internal and external policies and in the broader international context, for example through our contribution to the forthcoming World Summit on Sustainable Development in Johannesburg.

## Managing globalisation

*How does the Commission plan to make globalisation both socially fair and sustainable for people in industrialised and developing countries alike?*

Globalisation is not a panacea for the world's problems. Globalisation has brought many benefits, but also increased risks. The challenge is to maximise the former, while



minimising the latter. To achieve this, a balance must be struck between market capitalism and governance – at global and domestic level. In order to ensure that globalisation is both effective and fair, it must be controlled and managed. Therefore, we need to move towards a strong, innovative system of global governance – towards a situation where we can start to harness and steer the process of globalisation onto the right path.

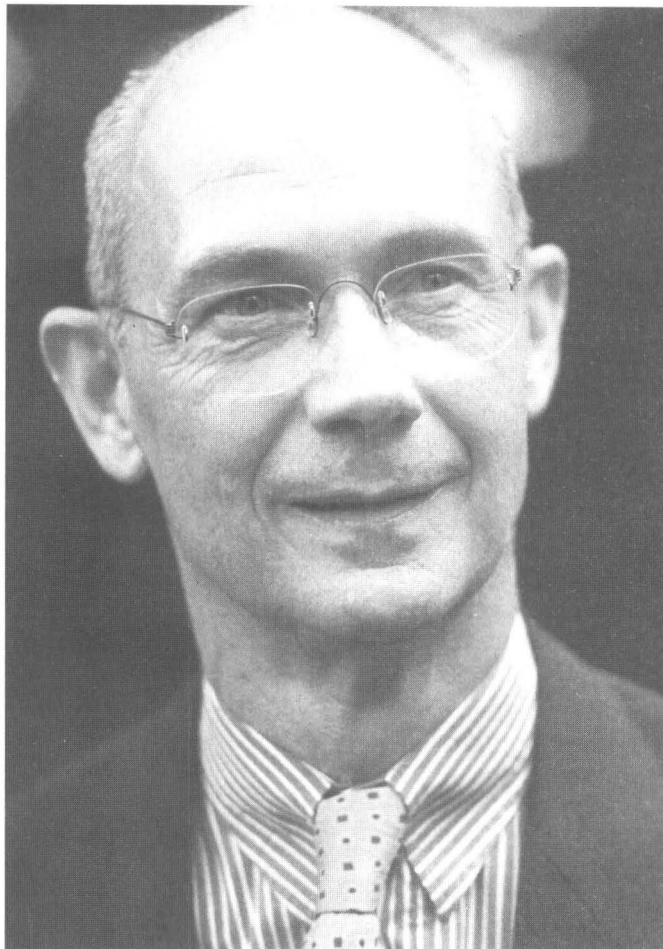
For this to happen, trade policy must reflect change and should be an instrument for change. This is why the EU is engaged in an open trade strategy, the core of which is the progressive removal of obstacles to trade, together with the non-discriminatory and transparent management of trade rules and the peaceful settlement of disputes.

### Towards global economic governance

*What is global governance? What are the shortcomings of the present international system? How do you envisage a future system of global governance? And what role would the EU play in this new international order?*

Certainly, if globalisation is to be sustainable, we need to strengthen the three pillars of global governance – trade, finance and norm-setting. The developed world, where resources and capacity are concentrated, has a key role to play in providing the lion's share of the political and financial support, which a concerted strategy will require.

However, all countries need to contribute to achieve this goal – including the poorest, where far-reaching reforms may be



needed. The EU, with our OECD partners, needs to deliver in terms of market opening, public and private financing and innovative approaches to environmental, health and consumer protection. This will involve difficult trade-offs and transitional adjustment costs.

Furthermore, a global economy calls for a forum of global economic governance, which is inclusive and representative. A first step towards the Economic and Social Security Council advocated by Jacques Delors could be a more representative G8, similar to that proposed by Guy Verhofstadt last year, comprising large actors or regional groupings (EU, NAFTA, ASEAN, China, India, Japan etc.) together with representatives of key constituencies such as Africa and the Mediterranean region.

### And the statistical input

*And finally, what kind of statistical system does globalisation call for? Is our current nationally-based system equipped to answer global questions?*

Globalisation is driven to a large degree by multinational enterprises, with subsidiaries and affiliates in many countries around the world. These large international groups trade not only with other companies, but to a large degree with companies forming part of the same group. International trade statistics need to be able to capture the trade flows within such large groups. This information will allow a more thorough evaluation of the benefits of globalisation, and facilitate the development of measures to counter potentially harmful side-effects.

FDI statistics are also taking on increasing importance in the context of globalisation. Relatively detailed FDI statistics are assembled by some regional organisations (eg. for Latin America), but more detailed statistics would be useful for all world regions. Much of this detailed information is not easily collectable from national statistics, but will have to be obtained from data sources that cover individual companies.

As globalisation progresses, one should not forget that international trade in services is taking on increasing importance. Unfortunately, the statistical coverage of trade in services is still in its infancy. Improvements are planned for the future, but again such data will continue to be very difficult to obtain from national data sources.

Nationally-based statistical systems form the basis for the provision of most statistics available today. This is unlikely to change in the near future and much has indeed been achieved through the provision of harmonised national statistics.

Nevertheless, there are areas where it would be useful to supplement these statistics, on a case-by-case basis, with survey-type information collected on a global basis from the main market players. This should be increasingly possible in those areas where the international differences in statistical treatment are small. Further advances in the world-wide harmonisation of accounting norms will certainly help in this respect.

In a word, we need all the best quality statistics we can lay our hands on for tomorrow's EU trade policy. ■

**ERKKI LIIKANEN**, Member of the European Commission responsible for Enterprise and Information Society, presents the role of the information society in globalisation and policy measures to support a sustainable development of this process. He explains how statistics can contribute.

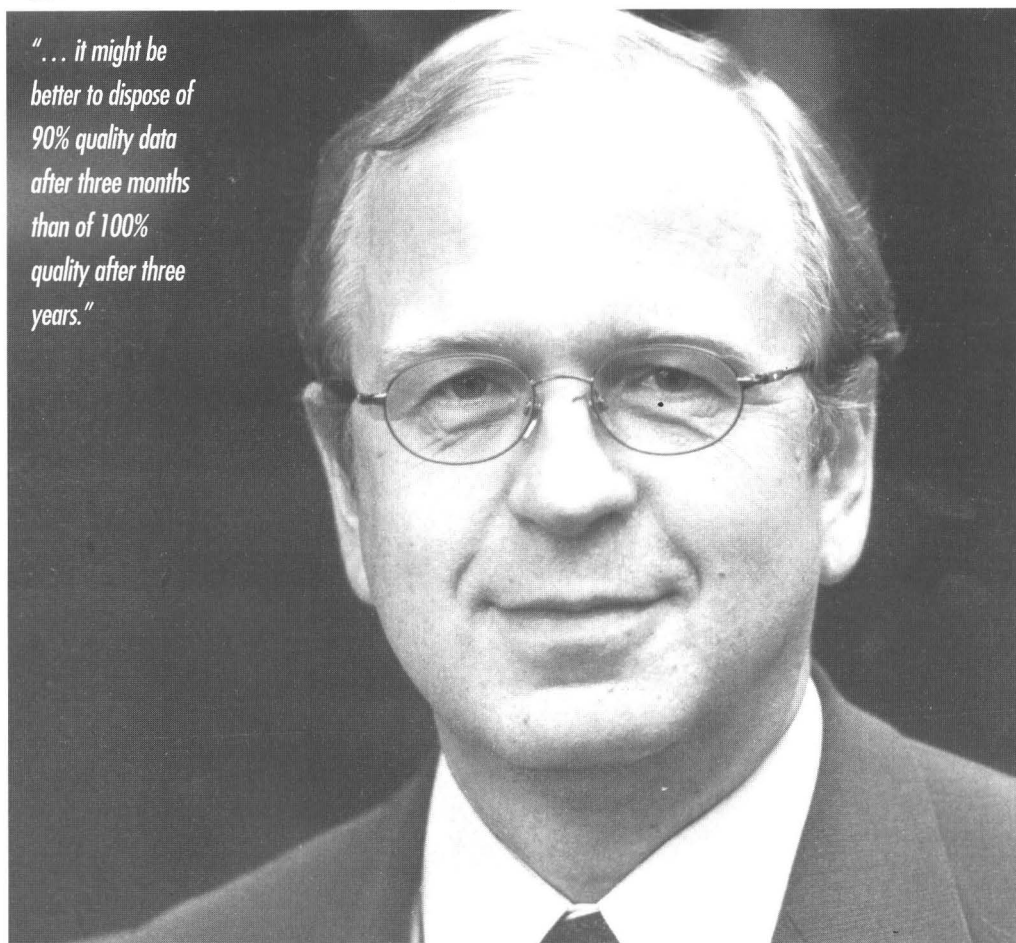
# Putting *e* into statistics

**G**lobalisation and the information society are closely linked. The information society does not know any borders. Firstly, because it is often impossible to tell when or whether information has crossed a physical border – where exactly is that web page you have just been visiting? Secondly, because knowledge is connected information. The more information you connect, the greater is the knowledge you create. In a networked economy, the optimal size of the network is therefore infinite – which means, to all practical purposes, global.

Beyond not knowing any borders in the realm of pure information and communication, the information society also makes borders less important for material things. For example, it makes goods tradable that previously were not, mostly by reducing transaction costs. Online one can easily read a newspaper in Chile or Australia, which offline would have been prohibitively expensive. One can order goods that could have been traded, but the existence of which was unknown to most potential customers. Finally, thanks to automatic translation tools, one can overcome – albeit with limited quality – linguistic barriers.

The key element in these effects is the Internet. Clearly, the information society should not be limited to the Internet: information technology can also be powerful offline.

*"... it might be better to dispose of 90% quality data after three months than of 100% quality after three years."*



However, this is where all the strands come together. And in so far as the Internet is an open network of networks, it is a concept, not a particular technology. Whatever new technology comes along, all you have to do is connect it to the existing networks, and it is part of the Internet. The principle of the Internet can never become obsolete.

## Towards new horizons

Although many of the benefits of the information society have

already come to Europe, we need to speed up the developments in order not to lag behind other regions in the world. To this effect, we launched in 1999 the eEurope 2002 action plan. Following the success of this exercise, the Commission has just been asked by the Barcelona European Council to propose a new action plan with the time horizon of 2005. The new plan will deal with a more limited number of issues such as security, broadband, eGovernment, eBusiness, contents and inclusiveness.

In all of these fields, it will be important to ensure that the benefits accrue to all citizens, ie. that inclusiveness is ensured. eGovernment clearly must be addressed to all citizens, but eBusiness, too, can only become an efficient way of increasing productivity and hence well-being if all the customers are online. Or take the new Internet protocol, IPv6: as long as only parts of the network are upgraded, the entire network is slowed down.

Clearly, upgrading Europe to eEurope, ie. an economy in which any transaction can be

made online, because companies and citizens all have easy access to the networks, will require large investments, from business, governments and consumers alike. Yet, spending on information and communication technologies (ICT) will be highly profitable. Certainly, as far as businesses are concerned, all available evidence points to a strong correlation between ICT spending and increased productivity and competitiveness.

### Down with the barriers

However, the take-up of e-business by SMEs (small and medium-sized enterprises) in Europe remains very limited. SMEs generate a substantial share of GDP and are a key source of new jobs. To make European SMEs fully committed to using the Internet as a leading-edge business tool, we must remove obstacles to the development of the digital economy and help SMEs to become more competitive by doing business electronically. This involves notably the removal of legal and regulatory barriers to e-business and addressing the ICT and e-business skills gap.

E-business is also a potential gateway for SMEs to take advantage of opportunities in global markets. It has the potential to sweep away the barriers between SMEs and their customers and give SMEs the chance to form cross-border partnerships more easily.

Recent evidence<sup>1</sup>, however, showed that even in EU countries where SMEs use e-business most commonly, the figures remain fairly low. In addition, for those SMEs who do engage in e-business transactions the majority of their sales

take place within their own national boundaries. We should face the fact that many SMEs still do not feel they can benefit commercially from participating in e-business at all, let alone outside their own country.

Another feature of ICTs is their potential to underpin sustainable development. While the quantitative effects are measurable in terms of economic development, more research is needed to improve the assessment of the environmental and social impact of ICT. This is a key element of the Commission's priorities in 2002.

It is also interesting to note that companies in Europe are increasingly reporting on the so-called "triple bottom line" – environmental, social and economic sustainability. It is also clear that the digital economy can provide better, faster information which would allow, for example, companies to become more competitive by reducing their energy costs and consumption in management of production processes, management of buildings, travel and the operation of ICT equipment etc.

### About the 'digital divide'

Internationally, ICTs offer both challenges and promises for the world's poorest countries. They offer enormous opportunities for sustainable local wealth creation. On the other hand, ICTs might result in a marginalisation of the poor and disaffected. The term 'digital divide' indicates that not everybody necessarily benefits from these revolutionary changes. There may be a wide gap between those who have access to ICTs and those who have not.

At the Okinawa Summit of July 2000, the G8 created a 'Digital Opportunity Task Force', which has charted the roles and responsibilities of the various actors in creating digital opportunities for all. A UN ICT Task Force has been created as a practical step to develop effective partnerships with the private sector, civil society and other relevant stakeholders.

The EU has set up dialogues and cooperation programmes on the information society with emerging countries from the Mediterranean, Latin America and Asia. ICTs should not be considered in isolation, but as part and parcel of an overall development strategy and the policy dialogue with beneficiary countries.

### Statistics pivotal

Given all these consequences of ICTs for society at large, it is imperative to be able to measure progress. However, measuring the information society presents some considerable challenges to statistical description.

Firstly, the role of intangibles, traditionally a difficult field for economic evaluation, is much bigger in the knowledge-based sectors than in the traditional economy.

Secondly, data collection can only be carried out once it is known which data are significant and which are not. Yet, the speed of technological and economic development is such that by the time a set of data has been identified as significant, it is already on the verge of becoming obsolete again.

This is why – for the benchmarking of eEurope 2002 – we have focused on a set of

fairly simple primary indicators, such as Internet penetration and the number of schools with an Internet connection. They are necessarily limited in their scope, measuring infrastructure development and prices much better than more diffuse structural change in business practices. But they give a clear overview of the developments in the target areas of eEurope 2002.

That, of course, is the key issue for policy-making: statistical analysis is a tool to describe reality in such a way as to be able to make, adapt or fine-tune policy.

Consequently, the analysis must be adapted to the policy. This requirement notably implies trade-offs between features. For example, quality must be matched against timeliness. It is clear that thorough preparation and very careful work produces the best results, but it also takes the most time. Yet, data about Internet in schools which are more than six months old are hardly usable any more for policy formulation. In such a situation, it might be better to dispose of 90% quality data after three months than of 100% quality data after three years.

To conclude, statistical analysis of the results of our policy will remain a key input into the policy process. Indeed, as the measurables – the policy goals – become more difficult to assess, the process of analysis becomes increasingly important. ■

1. EU survey conducted in 13 Member States, and sponsored by DG Enterprise. Between November 2000 and June 2001, 100 000 enterprises with at least 10 employees were surveyed. Except for Germany (retail and wholesale trade, restaurant and catering sectors), it covered all economic sectors.



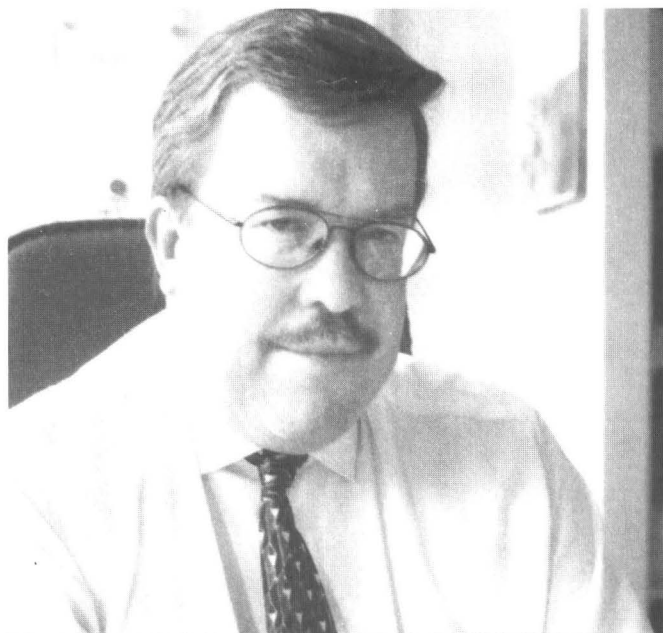
The term 'globalisation' has acquired considerable emotive force recently. While some regard it as the only path to growth and well-being, the collective voice of those who question the merits of globalisation has been getting louder and louder. The WTO – as the central pillar in the world trade architecture – is an ideal target for opponents of globalisation. *Sigma's* BARBARA JAKOB talked to **PATRICK LOW**, Director of the WTO's 'Development and Economic Research Division' about this burning issue.

# Steering world trade through the ocean of globalisation

**T**he central reproach towards globalisation and the WTO as one of its representatives is that commercial interests come before environmental and social interests and, moreover, that the WTO fosters this preference. Is this justified?

A lot of the criticism articulated since Seattle concerns environmental quality and questions of income distribution and poverty. And there is indeed some very legitimate concern about globalisation, the impact of globalisation trends in different countries and how deeper integration affects things that you didn't necessarily factor in from the beginning.

But it is misguided to hold the WTO responsible for every aspect of international activity and the interactions of governments and societies. The situation is a lot more complicated than our critics make allowance for. One has to remember that the WTO is a trade organisation and that its rules are agreed among governments. The WTO is *not* some sort of world government. For me, the question to ask is: 'Does the WTO do enough to recognise that we



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The division he heads is responsible for economic research inside the WTO secretariat and for managing the work of the Commission on Trade and Development, the Committee where development policy issues are discussed. The Development and Economic Research Division also has a major input to the WTO annual report and works closely with the WTO statistical service division.

When Mr Low joined the newly-created WTO in 1995, he had already gained experience in world trade issues at the WTO's precursor, the GATT, from 1980 to 1988.

live in a multi-faceted world or is it too focused on promoting trade?'

The opponents of globalisation and WTO critics show clear contradictions in their positions: on the one hand, they say the governments must have the independence to take actions in pursuance of their own policy objectives and, on the other, they claim that the WTO is not powerful enough in checking particular behaviour and policies. The rules of the WTO do, in many ways, give space to governments who wish to pursue environmental or social policy aims.

## A wider agenda

Looking back to the Doha conference, you can see that the trade agenda has evolved a great deal. The introduction of services and intellectual property are concrete examples of how the action field of the WTO has widened from trade of goods to other areas of concern. In many ways, this reflects new economic realities. If the WTO didn't take these subjects on board, it would become less relevant in



the system of global governance.

It used to be rather simple with an orientation focused primarily on trade in goods, with relatively few provisions on regulations and supporting norms, which sufficed to govern global trade. With continuing globalisation and increasing interaction, more and more regulations are needed in ever more areas, and that becomes very complicated to agree upon internationally. It also raises the question of how much of this the WTO should do, how much should be done by other agents of international cooperation, and how much should simply be left to national jurisdictions.

*Is there a growing need for globalisation to be tackled in its wider sense and, for example, environmental and social aspects to be governed on a global scale?*

It is certainly true that our institutions for addressing all these questions are not nearly as well developed or as strong as they could be. In that sense, there is certainly a deficit of global governance. In the environmental field, there is clearly plenty of scope for international cooperation, without which we would end up in deeply compromised environmental situations.

It is much harder to see clearly what should be done internationally on distributional aspects of economic policy. There is no doubt that it is a matter of concern at the international level. Some of our critics would claim that increased trade simply impoverishes groups of people. There can be no doubt that trade policy changes have distributional effects that are not all positive. But is this a reason

to restrict trade, bearing in mind the overwhelming evidence available of how trade enriches societies? Surely, the adverse distributional consequences of trade should be targeted by re-distribution policies. The answer is not to deny nations the benefits of international exchange.

*Will cooperation with other international organisations – as one of the WTO's functions – gain importance?*

Certainly. If you look at the Doha Declaration, you will see multiple references to the importance of inter-institutional cooperation. In the area of technical assistance and capacity-building, we have close relationships with UNCTAD, for example, but also with the World Bank, the IMF, UNDP and the International Trade Centre. In other areas such as standard setting, we

cooperate with the International Standards Organisation, and with the Food and Agricultural Organisation of the UN for certain agricultural and sanitary questions.

## Mediating without imposing uniformity

*Why are developing countries so reticent about extending the negotiating agenda to environmental and social issues?*

I think the reason why many developing countries have doubts about this kind of agenda is that they believe it could be driven by a protectionist inclination. They fear that as trade barriers of the traditional kind have come down, these are new frontiers for introducing measures that will frustrate the trade of developing countries

## A vision of free trade

Promoting reconstruction and economic growth through market opening and free trade was the aim that led to establishing the **General Agreement on Tariffs and Trade (GATT)** in the aftermath of the Second World War in 1948. The world trading system was born and developed in a series of trade negotiations, or 'rounds'. Following the Uruguay Round, the **World Trade Organisation (WTO)** was created in 1995 as the successor to GATT.

Together with the International Monetary Fund and the World Bank, the WTO is often perceived to be something like an all-mighty world government which rules over global issues. This is far from being true since it has no mandate for social or environmental standards, for example. It is a negotiating forum for the liberalisation of trade, watches over the rules to be respected and prepares new negotiating rounds.



Moreover, the WTO provides a mechanism for settling trade disputes as well as technical assistance and training for developing countries.

Decisions are taken by agreement among the governments of the member countries (usually by consensus), each of which has one vote.

Recent agreements concern intellectual property and trade in services. At the WTO ministerial conference in Doha in November 2001 a new round of multilateral trade negotiations was launched with environment and sustainable development, development, market access for goods and services and investment

and competition on the table for negotiation.

Comprising 144 member countries, which altogether account for more than 90% of world trade, the WTO is no exclusive club: around 30 countries are negotiating to become WTO members.

– that it is a response from interest groups in large countries that don't want to compete with low-wage producers.

And then I agree with many commentators in this field who believe that it is simply inappropriate politically, socially and economically to argue for uniform standards in these kinds of areas. Different countries face very different situations and have different priorities. What international agreements have to try to do is to mediate among those differences without imposing inappropriate uniformity.

As for labour standards, developing countries are reticent about negotiating wage issues or questions of child labour because none of these countries could afford higher wages nor would they be able

to eradicate child labour from one day to the next.

To the extent that these issues become part of an international agenda, they should be firmly embedded in a broad development context. Environmental standards and the demand for environmental quality will rise as income rises. The same is true in respect of social policies.

### One country, one vote

*Small and developing countries, including some commentators, feel that developing countries have difficulties in participating fully in the decision-making process ...*

I think that is absolutely true. Developing countries that are not well endowed with human capital, are inexperienced in these matters, and

feel they have insufficient bargaining power may well have difficulties.

The WTO aspires to be a universal organisation, and if it wants to maintain its universal character, it has to reflect the interests of all players. So, what can be done about it? We try to address those restraints and difficulties and provide training, technical assistance and capacity-building. We also cooperate with other institutions in this area.

The WTO is not a development organisation, yet three quarters of its members are developing countries. This is why we lay great emphasis on supporting them in their efforts to participate in the system through technical assistance and capacity-building. This aspect of the WTO's activities has received

additional attention in the Doha Declaration.

But at the end of the day, it is the governments that must articulate and stand for their interests. And they do have possibilities to fortify their position even if they are small. This is to do with being coherent about identifying and articulating a national interest, looking for ways of forming alliances with countries with similar interests etc.

People sometimes forget that the WTO is a consensus-based organisation. Consensus can be denied, even by small countries, if they feel strongly enough about something. That is a key feature of this institution and it's one of the things that make it hard to arrive at agreements. There is no core power that rules over everything. ■



## Statistics – a drawn-out business

The WTO statistics department collects, analyses and disseminates statistics on international trade on goods and services and keeps a large database on tariffs, which is used for tariff negotiations.

Patrick Low's connection with statistics is that of a user although his job currently consists more of management than of economic analysis. Nevertheless, he has some very strong convictions when it comes to statistics: "Statistics and lies sometimes make comfortable bedfellows in the absence of accuracy", he says.

Low notices shortcomings in terms of coverage but also when it comes to international comparability. "In the traditional area of statistics, a lot

has been done to provide a wide range of data with reasonable quality and comparability. But as soon as you try to branch out into other areas such as globalisation, you'll run into difficulties. As for comparability, we very often find it extremely hard to compare basic data across countries and over time."

Poverty and income distribution statistics are, according to him, generally very poor, too. Another difficulty is the weak statistical administrations in developing countries that give rise to limitations and failings in statistics.

Added to that, there is a basic problem that cannot easily be solved: "You might already obtain a reasonably

good global picture looking at relatively few countries, but the reality of millions of other people remains in the dark. Statistics tend to focus on one small part of the reality to the neglect of others."

And for a conciliatory ending, he makes some concessions to the quality of Eurostat's and the international statistical community's work: "I am happy with the headway that has been made in the very challenging area of trade in services, and the work on electronic commerce is taking off. This is but a start, the challenge is endless. We have to be aware that there is a constant need not only to try to improve quality in statistics but also to move into new unconquered areas."

There is little doubt that the fruits of globalisation are not shared out equally between industrialised and developing countries. But even within the industrialised world, far from everyone has the same opportunities, **Dr PAUL RÜBIG**, Member of the European Parliament and President of the European Independent Business Confederation, reminds us. *Sigma's* BARBARA JAKOB talked with him.

## Having a say in the rules of the game

**P**aul Rübig makes clear right from the start what concerns him most. Himself the owner of a small business, with experience of globalisation, he has made it his task to represent the interests of small and medium-sized enterprises (SMEs).

The European economy may be dominated by small businesses, but the 'global players' are still almost exclusively the large corporations. "For McDonald's or Microsoft, globalisation has long ceased to be an issue", he explains.

Only large businesses have the necessary financial clout and the ability to find their way through the labyrinth of legislation and customs regulations.

"It is much more difficult for small businesses to cross borders", says Dr Rübig. "That is why politicians must intervene to rectify this and also give SMEs the opportunity to get their share of the world market."

*So far, so good. But what about the worries dominating the current debate on globalisation, that developing countries will emerge from this process as the losers, I object.*



**Dr Paul Rübig** (49) is in his second term as a Member of the European Parliament for Austria. From a career as a blacksmith he went back to school to eventually study business management and write a thesis on international patent and licensing policy.

With his forge, he decided to take up the challenge of globalisation and built up an export department in his medium-sized business. After 15 successful years he was drawn into politics and was elected first to the regional, then to the national and finally, in 1996, to the European Parliament.

With his background, it seems only logical that he should represent the interests of small and medium-sized enterprises as the European People's Party spokesperson for SMEs. He is also a member of the Parliament's Committee on Industry, External Trade, Research and Energy and of the Committee on budgets.

Dr Rübig, who, as a member of a European Parliament delegation, attended the world trade negotiations both in Seattle and in Doha, sees the demonstrations against globalisation as motivated not least by a strong suspicion that what is masquerading as 'liberalisation' is in fact protectionism: "When high-ranking politicians speak to dockers on the fringe of the World Trade Conference and promise to protect them from competition, then it is not a question of equal opportunities, but of safeguarding privileges."

The 'justifiable outcry' of those who oppose globalisation has, he believes, set something in motion, the first results of which were in evidence during the Doha negotiations. For the first time, non-governmental organisations were really involved, the developing countries got more of a say in the decision-making process and greater consideration was given to their interests.

### First things first

For Dr Rübig, the recipe for the future is and remains 'liberalisation'. "The 40 poorest countries of the world can only



achieve prosperity, if we open up the markets for them, too, and enable them to sell their products and mineral resources. This is the way to higher added value, which means they will ultimately be able to pay better wages, improve social standards and eventually also take environmental measures", is his thinking.

Conversely, laying down conditions for the attainment of certain standards before exports are allowed, and thereby creating obstacles, would mean, according to Dr Rübig, putting the cart before the horse. He also sees a danger that countries that are today still at the negotiating table will become increasingly convinced that they are being fobbed off with crumbs by the industrialised nations. They could be tempted to resort to violent means, because they are no longer prepared to wait.

Without a further opening of the markets there is therefore, in Dr Rübig's opinion, no way forward. This applies equally to Europe and to its partner countries around the world.

In the EU, there are around 18 million **small and medium-sized enterprises** (SMEs, businesses with fewer than 250 employees). About two thirds of all employees in the EU – about 74 million out of 112 million – work in these businesses. Measured in terms of their contribution to Gross Domestic Product or operating taxes though, they are anything but small: SMEs produce 60% of GDP and bring in around 80% of operating taxes.

### Platform for the exchange of views

This means however that the world trade talks can no longer be conducted by experts behind closed doors and be limited to technical issues. Instead, he would like to see an open political debate, in which all issues are covered and common fundamental values and ground rules are discussed.

A European Parliament initiative provides for the setting up of a parliamentary assembly.

A limited number of Members of Parliament would hold an open debate on globalisation and set objectives, in consultation with non-governmental organisations. The necessary funding for this is already available.

What a functioning system of global governance requires above all though, according to Dr Rübig, is that Europe become aware of its role as a leading economic power and redefine its position in relation to international organisations. This is also an important subject for the Convention on the future of the European Union.

### From (global) payers to players

"Europe is still far too preoccupied with itself. 'Global payer' may be an accurate description, but as yet we are no 'global player'", he reminds us. "The European institutions must give serious thought to how we can have a part in laying down the ground rules in this world."

A united front by the countries of Europe at the world

trade talks is, he thinks, an absolute necessity here. "I fully agree with Commissioner Lamy that the EU must appear more united in this area and that Europe's voice in the world comes across differently from the voices of individual countries."

### Democratic accountability

For Dr Rübig, at least equally important is greater parliamentary scrutiny of trade policy, and therefore increased powers for the European Parliament in formulating and monitoring trade policy. A proposal on these lines was recently put to the Heads of State and Government by the Commission, but has not yet been accepted.

The European Union currently acts at trade negotiations on the principle that the Commission negotiates on the basis of directives approved by the Union's Council of Ministers and transmitted to the European Parliament. The Commission is assisted at negotiations by the Member States' representatives.

"The EU's bilateral agreements with third countries must naturally be subject to the approval of the European Parliament", says Dr Rübig. "We should – and we want to – involve ourselves more actively in this process. What we ultimately want to achieve is a balance between liberalisation of the market and socially and environmentally sustainable conditions. In other words, we must place the emphasis on a market economy, while acknowledging our responsibilities. The concept of an *ecosocial* market economy is for us a lasting vision."

## Statistics and globalisation

Dr Rübig: "As an aid to political decision-making, statistics play an immensely important role. Before we can develop strategies for the future, we must be familiar with structures and trends."

But precisely in the area of statistics on globalisation, there is a great need for action. There are, for example, almost no statistics available on the extent to which SMEs are involved in the process of globalisation", Dr Rübig regrets. "As yet, a breakdown of exports by business size class is just as rare as an analysis of the effects of exports on added value. Although admittedly that is more than a purely statistical question."

In this context, the international comparability of data is also once again coming to the fore. What is important, though, is that data are relevant and up to date. "We are willing to accept a certain margin of error, if data are made available more quickly. It is often not even a problem of availability or up-to-dateness, but quite simply of fast access. The aim is to create automated access to existing data (eg. from tax offices, banks etc.) in real time, so that data can be collected without the bureaucracy."



Heading the General Affairs directorate of the Commission's DG Trade, **FRANÇOISE LE BAIL** is one of the numerous people behind the scenes who contribute to animating the debate on the evolution of EU trade policy. Trade analysis and bilateral commercial relations with the countries of the former East Bloc are her directorate's two core functions, making her an ideal person to discuss globalisation issues and their statistical offshoots.

## Putting solidarity into globalisation

**T**he potential benefits of globalisation are immense – comparable with those stemming from European unification – and that is why, right from the outset, Europe has constantly striven for openness. The economy benefits with economies of scale and the specialisation that trade allows, but also thanks to greater competition and the spread of technologies. For the consumer, this actually means that goods and services are cheaper, offer greater variety and are constantly changing.

In the case of developing countries, international integration can also be a key factor in growth and help them catch up with more advanced nations. This is borne out by the history of Japan and the countries of eastern and southeast Asia.

The benefits of globalisation can even be felt with regard to the environment, where an awareness of global problems and even some tentative answers have begun to emerge – look at the follow-up to Kyoto or the emphasis in Doha on trade in environmental goods and services.

At the same time, the risks have increased in every field. It is for



this reason that the EU is not content merely to encourage openness but rather to ensure that it is based on proper rules and can foster sustainable development, just like all the initiatives we have already taken both in- and outside Europe.

I am thinking, of course, of health risks and more generally of environmental risks. But I am also thinking about the poorest countries that risk being left behind by the whole globalisation process, which is intrinsically extremely selective. Lastly, there are internal risks of increasing inequality, which

require mechanisms for internal as well as external solidarity to be devised.

*How can the risks of globalised, liberalised markets – such as the spread of diseases like BSE or GMOs or increasing instability through competition – be limited?*

There have to be rules. There are World Trade Organisation rules, which cover for example trade in products that may well cause problems when it comes to health and plant health. This affects half of agricultural trade.

The difficulty with a subject such as genetically modified organisms (GMOs) stems from the fact that there are different ideas about risks and that it can be hard to reconcile these ideas. The EU now follows the principle of precaution in its risk management, but this approach is not yet shared or acknowledged by everyone.

*What role does statistics play in your work?*

We act at every stage of trade policy. At the start, the analysis unit leads the discussion on the way policy should develop in

every sector covered by international trade talks – traditional market access (focusing more and more on non-tariff topics or recently incorporated sectors such as agriculture or services), but also on new topics such as competition and investment or even their connection with social and environmental issues – with an analysis of the impact that some or other free trade agreement will have on this or that partner.

The statistical system also has a role to play in crisis management. In this connection, it is absolutely vital that we have a system for monitoring trade in sensitive products, which can involve, for instance, adapting existing classifications. This issue arose during the 'mad cow' crisis and in connection with imports of genetically modified products.

Statistical information is thus a necessity. It ranges from country notes compiled for trips by Members of the Commission to the use, at a very detailed level, of trade flows for the compilation of indicators showing protection or econometric models useful for identifying priorities for market access. Providing information is a full-time job for two people in my directorate and has a prime place on our Intranet.

## No time to lose

*What are your information sources, and how do you rate Eurostat statistics?*

We are heavy users of statistical data bases. For trade in goods, we use virtually all the existing data bases, especially those of Eurostat (Comext), the United Nations (Comtrade), the IMF (DOTS) and the WTO. We also often use the CHELEM data base (CEPII), which is the only one that provides a harmonised world trade matrix.

We also make use of the information collected by Eurostat in NewCronos for trade in services, foreign investment (where we also have UNCTAD figures) and its macroeconomic series (supplemented by data and forecasts from DG ECFIN, the OECD, the IMF, the World Bank and WEFA).

We look at Eurostat data first – and frankly I'd be rather shocked if we didn't. On the whole, the quality is adequate, even if there are occasional problems that crop up. Updating is always very slow, especially when a Member of the Commission fails to understand that there are some data we don't have.

But, of course, we are well aware of the constraints affecting the production of harmonised statistical data for 15 EU Member States. In organisational terms, we have more problems with the instability of data bases, which are constantly being updated without anyone telling us about major revisions.

## Gaping gaps

*What are the main gaps in statistical information?*

International trade in services and foreign direct investment are the two areas where the policy aspects are the most important and where the statistical data are most lacking. They lag way behind trade in goods, where the information has been available for a long time, at a very detailed level, and for almost 200 countries, and which is also an area in which there has already been a lot of negotiation.

In the case of services or FDI, much still needs to be done, but the statistics we have exist only at a fairly aggregate level – and, to some extent, they are incompatible with the way negotiations are handled – and for a small number of countries.

This situation has a particularly detrimental effect on our positions and arguments – especially when other members of the WTO, such as the United States, have much more detailed data at their disposal. This is why we attach special importance to the discussions that are underway between Eurostat and the Member States on statistics concerning trade in services.

Another matter of priority for us are the statistics on the activities of foreign firms in Europe and European firms abroad. We feel that this 'real' picture of FDI is just as important as actual FDI statistics. The information is of direct use for talks on foreign investment and on services (since establishment abroad is

one of the four methods of supply according to the GATS definition) and more generally for all talks on market access, since the activities of foreign subsidiaries and the nationality of producers are not irrelevant when it comes to defining trade policy.

## Future hopes

*From your point of view, how should the global statistical system grow to reflect the globalised world appropriately?*

Globalisation brings a twofold challenge for official statistics. In the first place, we need to deal with the conceptual difficulties which it gives rise to and which jeopardise its scope.

A firm's nationality provides a good example (see articles on the following pages): as long as firms operated primarily in a national context, the definition of their nationality posed no problem and the activity of foreign groups was fairly easy to determine. But when groups become even more outward-looking, or when they merge with foreign groups, it becomes harder and harder to determine what's what. This means taking another look at concepts, definitions and tools that no longer apply.

At a more ambitious level, the statistical system needs to respond to the questions posed by globalisation. I have already mentioned international talks on services or FDI. But mention can also be made of e-trade, and more generally of an accurate understanding of how international integration occurs (significance of intra-firm trade, vertical disintegration, etc.). Only then will we be able to arrive at policy-making fit for a globalised world and of benefit to everyone. ■

Having finished her law studies, **Françoise Le Bail** started her professional career, joining the European Commission in 1977. She held various positions, among others, as Spokeswoman and Head of Cabinet but always faithful to her passion – external relations. Since December 2000, Françoise Le Bail is Director at DG Trade and in charge of resources, trade analysis, interinstitutional relations and communication, as well as bilateral trade relations with Russia and other countries of the CIS and the Balkans.

Globalisation has raised a number of issues for statisticians: the activity of foreign-owned enterprises, intra-group trade and its valuation, enterprise groups, foreign direct investment flows ... And it even puts one of the very basics of today's statistics into question, the concept of territoriality.

On the following pages, statistical experts address these questions. **DENIS LEYTHIENNE** of Eurostat's external and intra-community trade unit kicks off ...

# Trade as the motor of globalisation

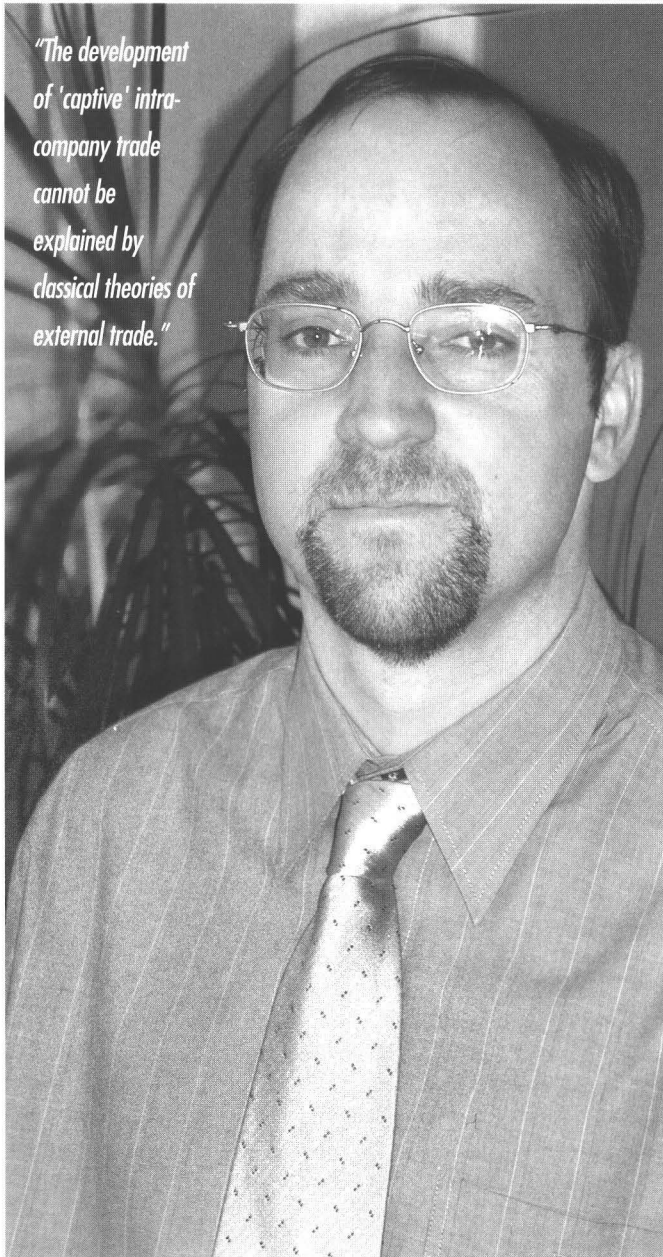
In simple terminological jargon, external trade statistics measure the physical movements of goods crossing national frontiers. From the very start, they have been linked to the customs duties levied at the borders of a territory and are thus based on reliable and detailed fiscal sources. One of the key contributions of these statistics is to measure, by means of the trade balance, any imbalances in a country's trade with the rest of the world.

They are, therefore, based on the concept of territoriality, which have made it possible to accurately monitor the upsurge in trade between national economies observed over the last fifty years. What they cannot do, however, is to provide information on the phenomenon of globalisation in which the main economic actors are no longer states but multinational companies, pursuing investment, production and marketing strategies on a global scale.

## 'Captive' trade

In a large number of sectors, trade flows reflect more the long-term strategies pursued by certain groups than the results

*"The development of 'captive' intra-company trade cannot be explained by classical theories of external trade."*



of national economic policy decisions. This is the case, for example, in the automobile sector in which there has been a significant expansion in intra-industry trade, with each production unit specialising in a component or a range of vehicles (see graphs below).

In the computer industry, it comes as no surprise now to learn that an international group has its headquarters in California, produces the chips in Malaysia and assembles the PCs in Ireland. In fact, this is almost commonplace. But, the rationale, at the group level, of such trade flows cannot be analysed when considering the bilateral trade flows between USA, Malaysia and Ireland.

As a result, we are seeing the development of 'captive' intra-company trade which cannot be explained by classical theories of external trade (such as Ricardo's theory of comparative advantages), but rather by the planned decisions taken by multinational companies.

The prices, themselves, used for this intra-company trade can differ from the market prices when the group seeks to take advantage of differences in taxation between countries ('transfer prices' phenomenon). For example, let us assume, that profits are less taxed in Malaysia than in Ireland. The Malaysian subsidiary may sell



the chips to the Irish subsidiary at a higher price than the market one. As a consequence, taxable profits will increase for the Malaysian subsidiary and decrease for the Irish one, leading to a net gain for the company as a whole.

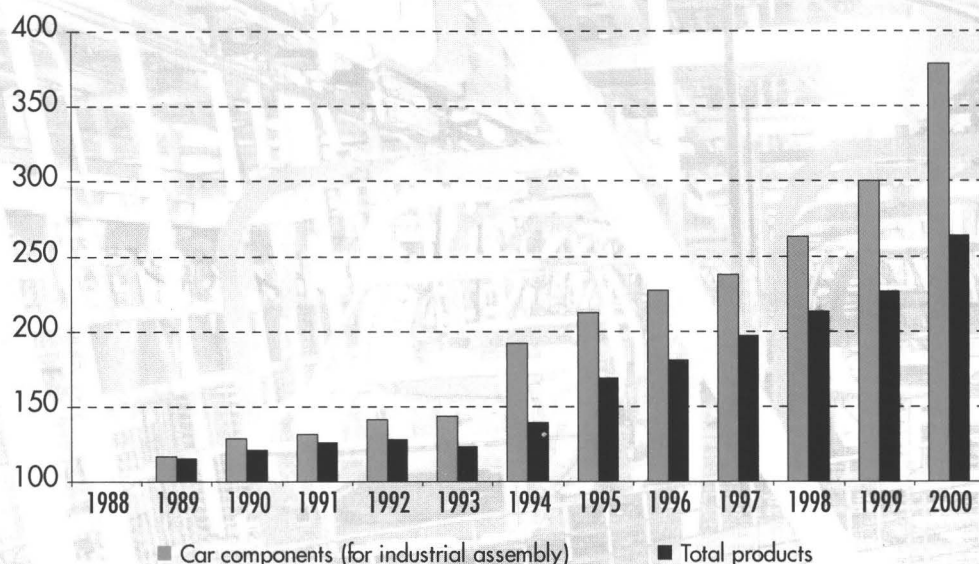
The increasing importance of multinational companies is, therefore, distorting the interpretation of external trade figures, when used for both general economic and trade policy decisions.

### Light at the end of the tunnel

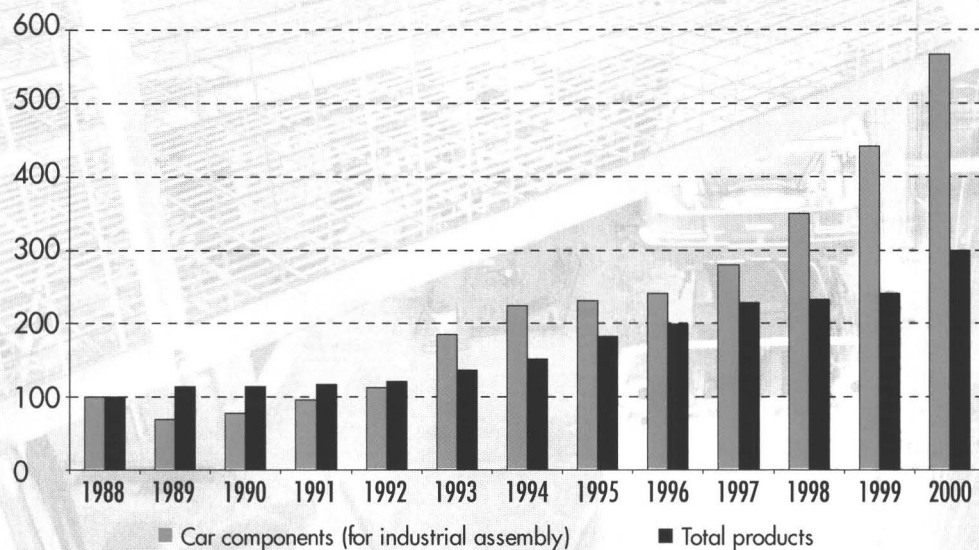
But there's light at the end of the tunnel. The European Union's main trade partners – the USA and Japan – and some of its Member States – such as France and the Netherlands – have crafted new surveys which aim to measure the weight of international groups in international trade. The USA, for example, has estimated that one-third of its trade in goods is made up of intra-company trade.

Within Eurostat, a 'Trade registers/globalisation' task force composed of five Member States was set up in 1998 to study the impact of globalisation on external trade and develop new indicators on this topic. Its methodological work, in cooperation with other Eurostat units and the OECD, identified two indicators for collection: the Contribution of International Groups to External Trade (CIGET) and intra-company trade. These two groups of statistics – based on the concept of capital ownership – would shed new light on the current statistics based on the concept of territoriality.

**Intra-EU trade (1988 = 100)**



**Extra-EU trade (1988 = 100)**



*The upsurge in intra-industry trade in the automobile industry illustrates a general trend towards specialisation – and it makes the somewhat intangible globalisation phenomenon rather more concrete (source: Comext).*

The main handicap so far has been the lack of data on these groups, particularly in business registers, and the lack of harmonisation in this field at European level. What is more, the collection of these new statistics has met with a certain amount of resistance within the

current context of lightening the burden of statistical declarations, particularly when it comes to intra-Community trade.

The solution? Specific resources will therefore need to be allocated by Eurostat and the national administrations to adapt the

statistical system for external trade. The goal is to match the tasks inherent in monitoring globalisation and catch up with the mechanisms already set up by the EU's main competitors. Like this, we'll be able to put more of our words into concrete action. ■



Istat is heavily involved in the international debate on transnational enterprise groups and the statistical measurement of globalisation. **ENRICA MORGANTI** shares her views on this difficult-to-grasp phenomenon.

# Climbing aboard the *same* globalisation train

**D**uring the last two decades, the increasing liberalisation of international transactions, the development of information technology and the decreasing costs of international transport, have pushed enterprises to adopt global strategies, involving not only trade flows and investments in different countries, but also the establishment of equity and non-equity relationships across borders.

These facts have substantially changed the architecture of the world economic system, the main economic actors being now transnational enterprise groups (TEGs), who play in a context of intense international competition.

Understanding the complex phenomenon of globalisation is crucial for evaluating the welfare effects of trade liberalisation and finance policies. From the perspective of the national economy, the debate focuses on the question whether cross-border inward and outward activities of global businesses are beneficial to domestic income and employment growth in the long term.

Moreover, intra-firm transactions as well as re-organisation strategies, pursued through mergers and acquisitions and relocation of activities worldwide, call for both stronger competition policy and regulation and for international

agreements on environmental and labour standards.

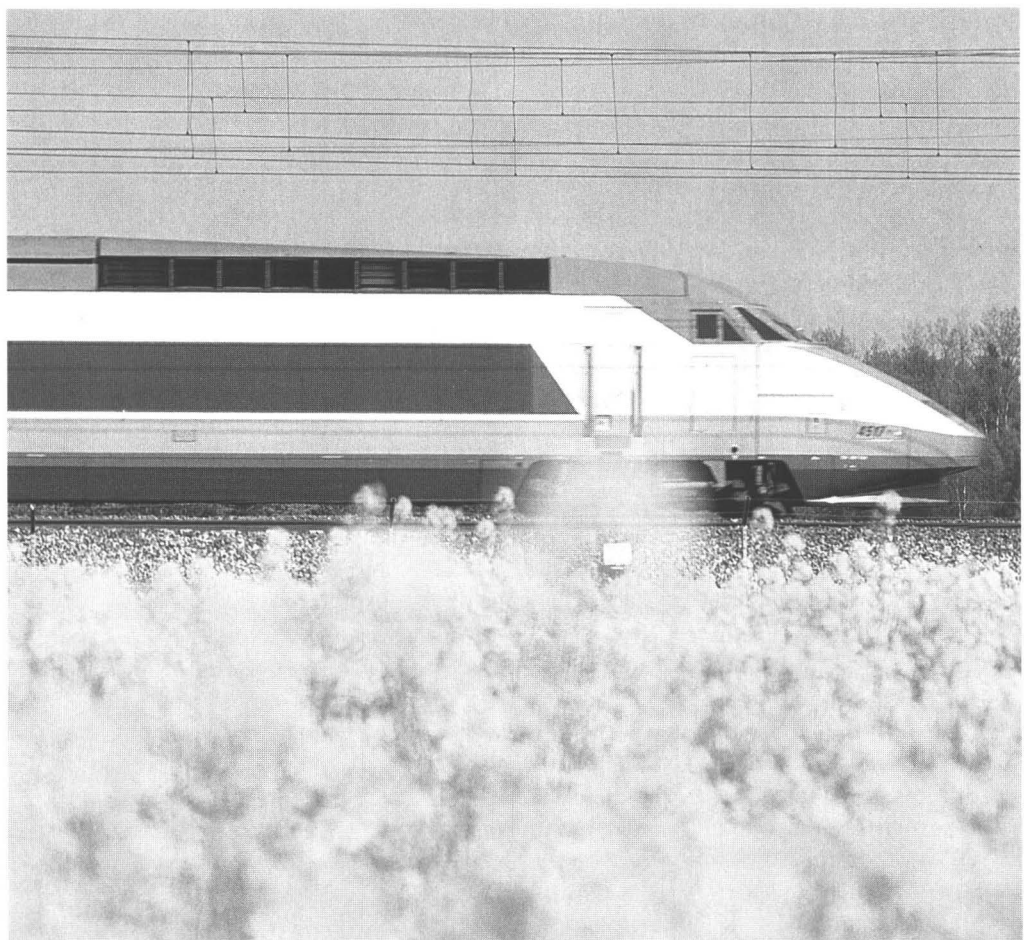
The evaluation of the impact of globalisation requires statistical information on how TEGs organise their activities, the relevance of intra-firm trade flows and the effects of technology transfers. Such information is needed at the enterprise level, including that between national parents and their foreign subsidiaries and vice versa, or at least at industry and country levels.

## Time for a new tool set

New economic phenomena always pose a real challenge for the statistician, and in the case of globalisation, the increasing demand for information crashes with the inadequacy of old tools. The System of National Accounts, based on the concept of territoriality, generates residence-based measures of production and trade, which are clearly behind the times.

As far as Balance of Payments is concerned, trade statistics took no account of the goods and services produced within a country by foreign-owned enterprises, while FDI flows are generally limited by the non-availability of breakdowns at industry and country levels, with the exceptions of a few countries.

Recently proposed ownership-based measures may offer alternative means to link transactions to a national domain, but as TEGs increasingly span



over several nations, this concept is probably going to lose its relevance, too.

## Hopes in the business register

A new statistical tool – that collects data on enterprises and their links with foreign subsidiaries as well as affiliates – is the business register, as a survey frame, built up and maintained by integrating administrative and statistical sources. The wealth of information it contains, classified according to internationally agreed concepts and definitions, makes it possible to reduce the statistical burden on business and improve comparability among countries at the same time. This means that national statistical institutes will be requested to ensure that their statistics increasingly comply with international quality requirements.

The removal of trade barriers and foreign exchange controls has often eliminated the regulatory mechanisms operated by customs and central banks, which traditionally provided administrative data on international flows and investments.

However, the development of competition policy and regulation, both on goods and services

and on financial markets, has engendered new administrative sources produced by market regulatory authorities, collecting information on equity and non-equity links among enterprises, mainly at enterprise level.

The main difficulties encountered for integrating such information are of both a methodological and practical nature. On the methodological side, there is the problem of harmonising concepts and definitions, since information is collected for different institutional purposes. In practical terms, there is the obstacle of achieving cooperation among national independent bodies managing such data.

Moreover, as far as TEGs are concerned, the current impossibility of using a single comprehensive source containing cross-border information on equity and non-equity links among enterprises, implies that only truncated TEGs can be observed in national registers, based on national collection systems.

This limitation can be reduced by adopting – at the international level – a common framework of concepts regarding the nature of such links. One of the main concepts to agree on is that of controls – as the basic link

for identifying enterprise groups – as far as operational rules are concerned.

## Herculean tasks

Difficulties arise because this concept varies widely according to the corporate legislation in each country, and the availability of administrative sources is strictly dependent on it. Simple operational rules are usually adopted, which lead to a certain reduction of the population of units considered as part of a group. In particular, it is difficult capturing and classifying non-financial links other than the absolute majority of voting rights.

The need to measure trade flows and investment among parent units and subsidiaries across countries will be satisfied only once trans-border control links between units in national registers are established. Cooperation between business registers is envisaged at least at European level, even though the obstacles to sharing information are generally enormous and, for the time being, insurmountable.

## The Italian case

What are we doing? The Italian National Statistical Institute is actively contributing to the international debate – in full swing at both Eurostat and the OECD – about developing harmonised concepts and definitions on TEGs as well as new statistical tools to measure globalisation.

During the last couple of years, our main energies have been devoted to the setting-up of a business register on enterprise groups. In 2001, a report containing the final result of a project entitled '*Delineation of European standards for the treatment of enterprise groups in business registers*' was released on CIRCA, the European website for exchange-

ing statistical information between interest groups.

In Italy, we particularly need to develop effective tools to measure the number and size of enterprises, due to the specific structure of the productive system, characterised by a high number of small and medium-sized enterprises (SMEs). In order to correctly measure market concentration, and to define industrial and competition policies, the real industrial make-up needs to be understood.

In addition, enterprise demography (births, cessations, mergers, break-ups, split-offs, etc.), yields different results if they are based on real independent enterprises, rather than enterprises belonging to an enterprise group.

Furthermore, information on the structure of enterprise groups at national level is fundamental to the study of 'contestable' financial markets and their efficiency in the allocation of enterprises' property rights. In Italy, enterprise groups mainly have pyramidal structures, and the market for corporate control is highly concentrated in family groups. Institutional investors – which have come onto the scene only in recent years and are undersized with respect to countries with more developed financial markets – are still insufficiently active to ensure favourable conditions for effective competition.

A deeper understanding of all these aspects would provide a precious informative instrument for policy-makers, engaged in building up a framework of industrial and competition legislation and policies in Europe to ensure the long-term growth of income and employment. It is up to the statistical world now to speed up and climb aboard the globalisation train. Although it is rolling full-steam ahead, there is still time to get on. ■

**Enrica Morganti** (35) has been a researcher at Istat since 1998. After studying economics in Pisa and London, she went on to do a doctorate in political economic research at the University of Ancona. Her first job was as a research student at the Institute of Foreign Trade in 1997 where she specialised in regionalism, free trade areas and foreign direct investment.

Since 1999, Enrica Morganti has been cooperating with Eurostat on enterprise groups, and is currently contributing to the drafting of a new chapter on enterprise groups in the 'Methodological manual of business registers'. She is also a delegate to the OECD DSTI-Working group (Directorate for Science, Technology and Industry) for the realisation of a 'Manual of globalisation indicators'.

Interest in the economic behaviour of enterprise groups is increasing rapidly: how they organise their activities and what the impact is on production, employment, research, investments, financial incomes and external trade at global, national and regional levels. From the international viewpoint, knowledge about enterprise groups is a basic tool to improve various statistics on globalisation.

However, measuring globalisation is far less important in explaining why work on enterprise groups is regarded as high-priority in Member States. A far more important factor at national level is enterprise groups' impact on concentration processes, which affect competition and regional development. Thus, information is needed for both multinational groups and all-resident groups and will also be of interest for economists in economic analysis.

Enterprise groups are becoming the third statistical unit in business registers, after enterprises and local units. The importance of the latter two units remains the same, as all three are used for different purposes. Furthermore, enterprise groups can be used to better delineate enterprises and thus improve the comparability and quality of business statistics.

## Who's in control?

According to *Council Regulation 696/93 on Statistical Units*, enterprise groups are defined as "an association of enterprises bound together by legal and/or financial links". As practical guidelines are needed, Eurostat – together with Member States – is currently preparing a chapter on enterprise groups for the 'Busi-

Enterprise groups are a central element when it comes to statistically monitoring globalisation processes. **ARTO LUHTIO** – head of the business register sector at Eurostat – answers some of the questions raised when it comes to capturing these multinational transborder actors through statistics.

# Enterprise groups: a hard nut to crack open



*"Enterprise groups  
are becoming the  
third statistical unit in  
business registers."*

Control is defined as a dichotomous variable and can only take value 1 (control) or 0 (no control). Partial control naturally happens, but it is not suitable for statistical analysis, because the groups would not be mutually exclusive.

The most important mode of control is the ownership of the majority of voting rights. Other modes exist and there are cases when owning the majority of shares does not necessarily mean control. On the other hand, control can be applied by a minority owner having 'golden shares' or the power to appoint directors.

## What needs recording ...

So, what should now be recorded for enterprise groups? This is certainly a matter of resources and the information available, but some basic requirements must be fulfilled: the units belonging to the group must be known, preferably the whole group structure including all links of control. The group head must be known and, preferably, the group should be recorded as a separate statistical unit with its own identifier.

ness Register Recommendations Manual'. The chapter will be finalised by the end of 2002.

The starting point for the creation of an enterprise group is to record when an enterprise controls one or several other enterprises, directly or indirect-

ly. In practice, control is mainly observed between legal units rather than enterprises. The identity of the legal unit (parent), which controls another legal unit (subsidiary), is now an optional variable in business registers but should become compulsory in the long term.



The nationality of the group is highly important, although sometimes it may be difficult to decide in which country the main decision centre is located. As groups are often engaged in many economic activities, it is recommended to record all the important activities, rather than the principal activity alone. A great part of the total employment is in enterprise groups and knowing this share is important for economic decision-making.

Data on turnover are important too but difficult to obtain and only consolidated figures for the group should be recorded. Changes concerning concentration (mergers, take-overs) deconcentration and restructuring in the groups are important for economic and business demographic analysis, and should be monitored.

### ... and where to get the information

There is a considerable variety of information sources. Information on enterprise groups can be collected by surveys, but depending on the country it can also be available in various administrative sources: consolidated accounts, chambers of commerce, fiscal files, etc. In addition, private sources have gained ground and are used in several Member States.

Whatever sources are used, the final checking of the data, combining it with the business register data and profiling of the groups is tremendously important. Profiling which is carried out in the statistical institutes means analysing the legal, operational, and accounting structure of the group at national and world levels (where possible), in order to establish the statistical units and their links and to determine ways of better collecting data.

As this involves a great deal of manual work, only the largest groups can be manually profiled. For smaller groups, an algorithm can be developed. This is now done in only a couple of countries, while others find that the information on large groups is sufficient for the moment.

### Different practices

International harmonisation in the context of enterprise groups and globalisation is indispensable. However, harmonising the definitions at EU level is not enough. Let's take an example: a certain enterprise group can, from country A's perspective, possess country B nationality, while from country B's perspective, the same group may be considered as having country A nationality. This is why it is essential to agree on the basic definitions at OECD level at least, which suffices for now since only very few non-OECD countries keep information on enterprise groups.

A proposal for defining nationality exists in the OECD (draft) Manual on Economic Globalisation Indicators. The EU methodology is consistent with OECD methodology, but more elaborated and detailed. Enterprise groups are discussed at several other international forums and, hopefully, the basic definitions can be agreed later at UN level.

### State of the art in the EU

The work on enterprise groups in the EU has had a good track record, taking into account the heavy workload and many difficulties involved. Ten EU Member States already have some (albeit unharmonised) information on enterprise groups. What is

more, three Member States are currently working on it and plans exist in the remaining two countries. Within a few years, all EU Member States are expected to have information on enterprise groups.

But none of the EFTA and Candidate Countries possess information on enterprise groups yet, although in two countries this is planned or at the starting phase. Depending on national pressure to provide the information, some countries are likely to kick off the work soon, while others may wait for EU methodology to be finalised.

Development in enterprise group statistics in the EU, EFTA and Candidate Countries is monitored in the Business Register Annual Inquiry.

Last year, the OECD and the UN Economic Commission for Europe decided for the first time to inquire about the situation in their own member countries. Thus, we now have a picture of the state of the art in about 50 developed countries.

In most developing countries, the basic business statistics infrastructure, such as business registers, are still in the planning or construction phase. As the EU business register methodology is the most developed and the only international one, it is widely used for reference around the world and as a model by many countries developing their own registers.

### The confidentiality mountain to climb

The biggest problem is confidentiality, as exchange of information on multinational groups between National Statistical Institutes is now forbidden in the national legisla-

tion of almost all countries. In many countries, there are even problems in exchanging information between the statistical institute and other statistical compilers like the Central Bank or Customs Office, although thanks to changes in legislation this problem is slowly receding.

The strict confidentiality rules may seem strange when they concern information such as company accounts, which are public, published in newspapers, and which can be bought from commercial providers. But as the statistical institutes can easily combine public data with their various existing data, they are – and with good reason – very strict about confidentiality.

Nevertheless, this confidentiality problem must be solved. There is a clear need for adjusting European legislation to remove the restrictions concerning the exchange of enterprise group information at EU level. Naturally, the exchange of information would only be possible between statistical institutes, and no information would be released to any third party.

Using one or several commercial providers for Europe- (or even world-) wide information on enterprise groups is also an option worth considering. But the downside of commercial sources is (apart from the price) their quality, which can be relatively good for one country but not good enough for another.

To wrap up, the proposed European business register of multinational groups does not seem feasible at the moment. As the implications of the various possibilities are still vague for the time being, we need to study all the options in depth. ■

With the continuous trend of globalisation, there has been increasing interest in statistics on the presence and performance of foreign-owned enterprises. **BETTINA KNAUTH**, head of sector for development and analysis of structural business statistics, elucidates.

## A driving force for the integration of the world's economies

**F**or a long time, the process of economic globalisation used to be driven by the international trade of goods. Nowadays, the establishment of economic activity abroad constitutes an important additional motor for the integration of the world's economies. Consequently, transnational enterprise groups operating in a world-wide market beyond national borders have become one of the main actors in the globalisation process.

The statistical analysis of foreign affiliates sheds light on one of the principal relationships within such transnational enterprise groups – the link between the mother company (the controlling enterprise) on the one hand and the affiliate (the controlled enterprise) on the other. Such a perspective necessarily reduces the complexity of enterprise groups, as other links between enterprises within the same group are left unconsidered. This limitation is the price to be paid for a pragmatic approach that results in relevant statistics without necessitating the profiling of entire enterprise groups.

The link between the affiliate and the mother company can be viewed from either perspective. The statistics collected under the



*"Foreign affiliates account for less than 1% of the total number of enterprises but for some 15% of the total value added in many EU countries."*

concept of inward FATS take the perspective of the affiliate and analyse the economic activities of the foreign affiliates in the reporting economy. Statistics collected under the concept of outward FATS (see panel on next page) take the opposite perspective and analyse the foreign affiliates controlled from the reporting economy.

### More than one way

Because foreign affiliates constitute a subset of all enterprises in an economy, one way of approaching inward FATS is to break down business statistics by the nationality of the enterprises exercising the foreign control. This is the approach usually taken within the framework of structural business statistics.

Alternatively, foreign affiliates can also be conceptualised as a subset of foreign direct investment enterprises – the subset, in which foreign direct investment has attained a level corresponding to foreign control. Balance of payments statistics normally uses this approach.

Both practices have their respective advantages and disadvantages. The plus point of the first

approach is its ability to link data on foreign controlled enterprises to data on the economy in general. In particular, this means that the characteristics of foreign affiliates as economic actors can be compared to the characteristics of other enterprises within the same economy.

The second approach has the benefit of being able to complement the picture by data on outward FATS, thus providing information on the other side of the coin. When we combine both these approaches, we obtain a complete picture of the role played by foreign-controlled enterprises.

### What do we learn?

A first and basic element of this picture is the information about the presence of foreign affiliates and – more importantly – their economic significance. Whilst foreign affiliates

account for less than 1% of the total number of enterprises, their economic weight is substantial, as they account for some 15% of the total value added in many EU Member States.<sup>1</sup>

Foreign affiliates are, of course, not found uniformly distributed across the entire economy. Therefore, a separate analysis of different economic activities can shed light on the question of which activities are most subject to the globalisation process.

Results show, for instance, the extreme heterogeneity within the services sector. While in activities such as the electricity, gas and water supply industries – which have all had market protection for a long time – the importance of foreign affiliates is negligible, foreign affiliates in some Member States even dominate other sectors

## What are FATS?

The General Agreement on Trade in Services (GATS) defines the establishment of foreign affiliates as one of the modes of supply of services. For many services, such as hotel and restaurant services, commercial presence abroad constitutes the only viable possibility of trading; for others, such as retail trade, it constitutes by far the most attractive channel.

The set of statistics used to measure the extent of such cross-border supply of services through the establishment of foreign affiliates has been termed 'foreign affiliates trade in services statistics', or 'FATS' for short. In the meantime, the general focus on globalisation issues has resulted in an increased interest in the statistics on the economic activity of foreign affiliates as a topic in its own right, thus extending statistical coverage to other sectors of the economy beyond services. Indeed, the importance of foreign affiliates is currently higher in the manufacturing industry than in many of the services sectors. Because of this, the acronym FATS is used nowadays to describe the statistics on the economic activity of foreign-controlled enterprises in general, regardless of the economic sector concerned.



such as the wholesale of pharmaceutical goods or of office machinery and equipment.

Another important angle for the economic analysis of the globalisation process is the country of residence of mother companies. Analysis shows that a substantial share of what are considered foreign affiliates in the EU actually originates from other EU Member States. Regarding non-EU countries, the statistics show the overwhelming role of the United States, as opposed to the low significance of other countries, and in particular Japan.

Apart from basic information about the extent of foreign control and its breakdown by economic activity and country of control, FATS also provide the raw material for more economic analyses and in particular for the analysis of the differ-

ences in the productivity, performance and profitability of foreign affiliates in comparison to nationally controlled enterprises.

Such an analysis can give important insights into the competitiveness of EU economies. But beware, the interpretation of the figures calls for some caution. Although basic figures show that foreign affiliates often appear to be more productive than national enterprises, this simple message might well be misleading, as the effects of size of the enterprise and the enterprise group are usually ignored.

Combining these perspectives can supply the raw material for detailed economic analyses of the role of specific foreign countries in specific economic activities and the respective international competitiveness of certain sectors of the economy.



## A few hurdles to jump

The main challenges ahead are of varied nature and therefore we need a diverse tool kit at hand.

Despite several years of data production, a single **framework** encompassing the perspectives of structural business statistics and foreign direct investment is still missing. Both approaches currently co-exist with the result that FATS data are collected not only by National Statistical Institutes as part of structural business statistics, but equally by National Central Banks in the framework of balance of payments statistics.

In order to reconcile the approaches, representatives of both institutions met together with Eurostat in a first joint working group in order to foster exchange of information and collaboration. Given the encouraging experience, further meetings of this kind are planned. What is at stake is the cost-effective production of the statistics as well as its coherence with two different frameworks.

As far as **methodological development** is concerned, considerable progress has been achieved over the past few years. These methodological developments have taken place in collaboration with other international organisations and, in particular, with the OECD. Nevertheless, rules for allocating foreign affiliates to the country of control still need to be agreed for specific cases, in particular enterprise groups involving joint ventures, multiple minority ownership, holding companies or natural persons. Based on the forthcoming OECD Manual on globalisa-

tion, Eurostat intends to prepare a detailed implementation guide addressing all special cases.

The most important difficulty concerning the production of statistics on foreign affiliates, however, does not lie in the fine-tuning of the methodological guidelines, but in the availability of reliable **data sources** for the production of these statistics.

In most Member States, these statistics are produced through linking various sources together, some of which provide the information on the economic characteristics, while others provide the information on the country of ultimate control. In particular, the latter sources tend to be incomplete, especially as far as small enterprises are concerned, lack reliability and require time-consuming additional checking.

What is more, the process of linking is fraught with practical problems and possible errors due to differences in coverage, missing unique identifiers and non-overlapping samples. In order to tackle these practical difficulties of data production, the joint working group embarked on the exchange of good practices. The goal is to enable all Member States to take full advantage of existing experience and to encourage all Member States to collect data on FATS.

Beyond these challenges lies the strive for **completing the statistics** with additional aspects of high relevance for policy-makers, which have not yet been addressed in the current data collection. Such information relates mainly to three aspects, the role of foreign affiliates in technology transfers and R&D, the mode of entry into the economy (whether by starting up new enterprises – so



called greenfield investments – creating joint ventures with local enterprises or taking controlling interest in existing enterprises) and, lastly, the motivations for setting up a foreign affiliate.

In addition, the **interpretation** of the productivity, performance and profitability of foreign affiliates in comparison to nationally controlled enterprises is currently hampered by the fact that foreign affiliates are compared with all nationally controlled enterprises. Whereas foreign affiliates generally belong to (relatively large) trans-national enterprise groups, nationally controlled enterprises include both independent enterprises, which could be quite small, and enterprises belonging to national groups. A valid interpretation of these comparisons would however presuppose comparing like with like, ie. to compare in

both cases only enterprises belonging to enterprise groups.

## What next?

The recent initiative of a joint working group across institutional boundaries was a successful step in encouraging collaboration and creating synergies for producing FATS. In parallel, a joint regulatory framework for the collection of FATS will be prepared that should ensure the stability of the data collection and the participation of all Member States. Given that almost all Member States already produce data in one framework or the other, a full coverage of the EU seems within reach. ■

1. Within structural business statistics, full data sets on FATS are available for Denmark, the Netherlands, Finland, Sweden and the United Kingdom, whereas more limited data sets are available for Spain, Ireland and Italy.

In the following article, **ANNE-CHRISTINE STRANDELL** of Sweden's ITPS – the Swedish Institute for Growth Policy Studies – outlines her views on the growing seamlessness of international business, its penetration in Sweden and how statistics needs to catch up.

# Globalisation at the service of growth

**G**lobalisation is mainly an expression for new and more complex relationships between trade and direct investment as well as an increased dependence between performance of businesses within an enterprise group but located in different countries.

Today, the focus on globalisation often relates to the upward trend in direct investment. The acceleration of mergers and acquisitions in the US and Western Europe is the principal motive behind this trend. Eurostat's Globalisation Reflection Group used the following definition: *The existence of interactions between enterprises residing in different countries which are related by other links than mere market, trade and their socio-economic consequences.*

## Presence is essential

Increased direct investment is, in many ways, associated with cross-border sales and the need for a physical presence. For products that need to be adapted locally, being located near the customer is essential. Many types of services can only be sold in other countries through direct investment, that is, local presence. For manufacturing companies, direct investment is often a result of trade. Direct investment can also come

about because of ownership advantages, ie. internalising operations.

The wave of acquisitions in the 1990s differs from the previous rounds of the 1980s'. Before, deregulated capital markets made it easier for companies to expand globally. Now, other driving forces for global expansion have become more important. Company strategies, for instance, are an increas-

ingly important factor. They are often focused on becoming bigger and bigger in order to face growing international competition and manage rising research and development costs as well as concentrating resources on their company's core competencies.

Companies are also streamlining operations by reviewing the efficiency of their global activities. This also results in increased competition in global enterprise groups. Deregulation in telecommunications as well as in the financial and energy sectors has also helped to increase direct investment.

In the 1990s, market entry in Sweden and in other industrialised countries seems to have been dominated by the acquisition of existing companies. The principal patterns of international expansion, up to the 1960s, mainly consisted of greenfield investments.

An interesting issue is therefore if different modes of entry such as greenfield investment or acquisitions have different long-term impacts on the national economy in terms of employment and growth. Even the basic question – the extent of different modes of market entry in different countries – has not yet been completely answered.

## Globalisation in the land of the Vikings

Sweden has experienced a large increase in inward foreign direct investment during the 1990s. At the end of 2000, there were 5 500 foreign-owned enterprises in Sweden, employing almost 500 000 people. Foreign-owned enterprises accounted for 19% of the total employment in the Swedish business sector.

Foreign-owned enterprises in Sweden accounted for 40% of total exports of goods and services from Sweden to other countries, 34% of R&D expenditure and 20% of turnover in the total business sector in 1999. In services, foreign-owned enterprises accounted for more than half of Sweden's exports. Manufacturing of pharmaceuticals and motor vehicles are now dominated by foreign companies in Sweden, mainly due to the acquisition of some very large companies.

US owners clearly dominate as regards share of employment, turnover, value added, exports, investments, R&D expenditure and personnel costs. The United Kingdom accounted for the second highest share, ie. one third of all foreign-owned enterprises' R&D spending in Sweden. In terms of turnover, Finland was the second most important foreign owner.

## Anne-Christine Strandell

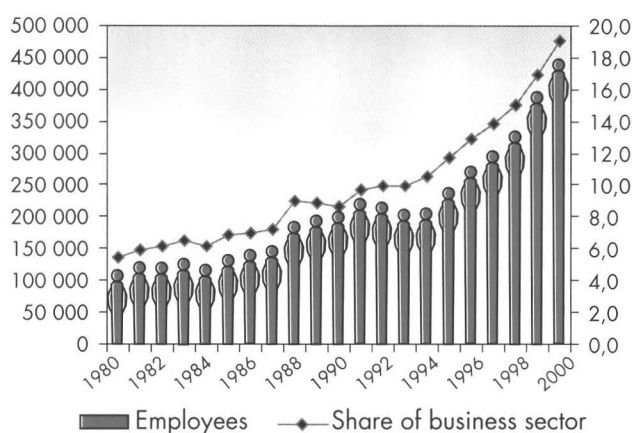
is responsible for statistics on international business at ITPS as well as analysis on globalisation of firms and clusters. She is also the Swedish delegate and vice-chairs the Statistical Working Party of the Committee of Industry and Business Environment and the Globalisation Session at the OECD, and expert on foreign affiliates (FATS) at Eurostat. She was also an expert in Eurostat's Globalisation Reflection Group.

## Mode of entry in Sweden

(stock at the end of 2000)

Mode of entry	Number of enterprises	Number of employees
Acquisition	2 700	290 900
Greenfield	1 300	55 800
Merger	190	52 600
Joint venture	40	3 300
Don't know	100	4 700
No answer	990	29 600

## Number of employees in foreign-owned enterprises



Source: ITPS, *International business*.

## What we know ...

The main mode of market entry has been the acquisition of Swedish companies. In the public debate, negative aspects of overseas ownership have dominated. Worries have been expressed that inward investment by acquisitions might lead to reductions in production and employment or to the relocation of headquarters and other strategic functions. Recently, the closures of some foreign-owned manufacturing plants and possible relocation of these plants to other EU countries have been widely debated.

Several studies regarding the economic impact on the national economy of foreign ownership led to the conclusion that inward investment so far has had more advantages than downsides<sup>1</sup>. However, many studies only covered a small sample survey of foreign-owned companies and mainly in the manufacturing industry. Often, only a limited number of variables have been analysed and some are just case studies. Other studies have been restricted to a cross-section instead of an analysis over time.

This is why more extensive analysis is needed and why

ITPS is planning a project in order to analyse the long-term impact on growth and employment by considering different modes of entry such as acquisition and greenfield investment.

## ... and what we would like to know

There are two main future challenges for statistical providers: data should be more up to date and we should try to find out why these phenomena are happening. Statistics and, especially, internationally harmonised data on globalisation are lagging behind. At the beginning of 2002, the latest data published on foreign affiliates in the EU covered five countries (Denmark, Finland, the Netherlands, Sweden and the UK) for the reference year 1998. Yet, dramatic changes have occurred since 1998 in the structure of cross-border ownership.

There is also an increasing interest among politicians to obtain more accurate comparisons between countries. The question of relocation of businesses in Europe due to state subsidies is also of growing importance as competition among countries is increasingly attracting foreign direct investment. Market entry modes such as greenfield investment or acquisition – with its long-term impact on employment and growth – is also an important issue. At the same time, the public debate on the effects of increasing foreign ownership in Sweden is fuelled more by sentiment than concrete knowledge.

Several comparisons of foreign and national enterprises show that foreign enterprises are more efficient, on average, than national ones, ie. they have higher value added per employee. There is still no explanation for this difference, which is why more detailed studies of comparable categories of enterprises

## ITPS in brief

ITPS – the Swedish Institute for Growth Policy Studies – is a relatively young government authority, founded in January 2001, responsible for policy intelligence, evaluation of industrial and regional policy measures and official statistics in the areas of international business, firm creation, survival of new firms and bankruptcy as well as on information and communication technology related to the business sector. Its task is to provide a better knowledge base for a forward-looking growth policy and an in-depth understanding of how growth is created and what factors adversely affect growth.

More information and the ITPS reports are available on its website at [www.itps.se](http://www.itps.se)

are also needed. Another subject that has not been completely surveyed is the relationship between trade and investment. Are they substituting or complementing each other?

That makes a bundle of questions needing answers. But the first priority must be to encourage more EU countries to provide basic harmonised data on globalisation such as the number of employees and turnover related to inward and outward investment. ■

1. Strandell AC. 1999, 'What are the impacts of direct investment on Sweden?' (In Swedish only).



The OECD's statistical wing is in much the same boat as other statistical organisations when it comes to tackling globalisation, ie. how best to set about measuring the phenomenon. And it's no plain sailing. *Sigma's* Glen Campbell spoke to the OECD's Chief Statistician, **ENRICO GIOVANNINI**, to get his thoughts on the issue and find out what they're doing.

## "Fortune smiles on the best prepared"

**T**he OECD – and to give due credit, its Directorate for Science, Technology and Industry, responsible for globalisation and information society statistics – has definitely got its head down on the development of globalisation statistics.

Apart from developing international trade in services data – on which, the Statistics Directorate will produce for the first time a publication with data by partner country – it has its fingers in other pies, too, such as migration, the internationalisation of information and communication technology (ICT) and sustainable development, with the aim of stretching statistics on a globalised world beyond economic statistics alone. A point which Mr Giovannini feels strongly about.

On globalisation, the OECD draws principally on four statistical areas: international trade in goods and services; the activity of multinational firms, and particularly the activity of foreign affiliates in manufacturing and services (FATS); foreign direct investment and movement of people. In addition, it is trying to measure the degree of globalisation for at least four pro-

gressive levels or subject areas: product, firm, industry and country.

They also distinguish between three progressive dimensions of globalisation: trade, multinationalisation of production and technology transfer. These are present to varying degrees in different countries and interact with each other; some countries are at the first step and others already at the last. Says Mr Giovannini: "This makes the overall evaluation difficult, because we are often having to compare apples with pears as far as models are concerned".

### Manual out soon

At the beginning of next year, the OECD will publish a manual on economic globalisation indicators – providing a framework of methodological and statistical guidelines for constructing indicators on an internationally harmonised basis of use for policy-makers and for the systematic monitoring over time of the progressive degree of worldwide economic integration.

Initially, they had intended to classify the globalisation indicators into three groups,

according to whether they measure the extent and intensity of globalisation, the impact of globalisation on economic performance, or globalisation's tie-ins with policies and structural reforms. Because work on the first category is the most advanced, the two last groups will be left out for the time being.

They are also trying to 'boil things down' in their attempts at creating a core set of indicators, bringing together, for example, an aggregate of exports and imports, portfolio investments, inward and outward investment flows, share of production and employment under foreign control.

Mr Giovannini hastens to point the spotlight on the efforts underway elsewhere – at all levels – such as the creation of a glossary of statistical definitions taken by the most important international manuals (ie. the system of National Accounts) to be released soon to help build up the OECD statistical information system. In conjunction with Eurostat, they are also busy developing a joint glossary of metadata definitions to streamline effort. "We're all in this together", he says.

### A difficult phenomenon to capture

Despite the OECD's commendable trade data and its energies in developing trade in services data, its statistics are a long way off from catching all these elements. The gaps, for example, in data for offshore production and technology and the abundant technical wrinkles make this crystal clear. I asked Mr Giovannini why it was so troublesome developing these kinds of statistics.

"The first snag is confidentiality. What we need is data linking firms between countries, but strict rules governing data transfer between institutions prevent this. The only way to get this information is to ask the businesses themselves, but they are somewhat distrustful of statisticians and give little away. And when we can get our hands on data, the question of reliability all too often rises to the surface.

"The next problem concerns information on multinational groups. Identifying certain groups is sometimes nigh impossible. Although we have statistics on enterprises

and businesses, we have none on groups. What we need are statistical registers to be able to indicate the structure of groups, but again, registers are nationally-based and have no cross-linkages and so forth.

"In other cases, the difficulty comes from the definition of transactions, relationships, multinationals, e-commerce and so on. In today's world, it can be difficult establishing just who exactly is doing what, for example, if you buy something managed by

somebody in India but delivered by someone else in another country. In the area of e-commerce we have developed guidelines that member states are using for surveys, but it is proving difficult as long as statistics are national."

### Measuring for what?

It's not easy saying whether a country or a region is globalised or not. And looks can be deceiving. Says Mr

Giovannini: "Japan, for example, is a very globalised country beyond its borders, exporting products and investing worldwide, but then when you look at the domestic situation, it is not nearly as porous. Again, although in the United States about 40% of high-level manufacturing imports come from intra-firm trade, making it globalised, you could have a different situation at the industry or firm level.

"Perhaps", he continues, "it is not very important to say whether a country is globalised or not. It gives no concrete suggestion in terms of policy-making or social analysis because it depends on which kind of globalisation has been developed in a country. In view of this, the future looks bleak for a single measure or globalisation index – sometimes canvassed as a yardstick."

Mr Giovannini also calls for caution when thinking about using globalisation measurements for ranking geographically between regions or countries. He draws on his own country's experience: "If you look at data for the north-west of Italy, the degree of globalisation for businesses is considerably higher than for the north-east, which seems to be counter-intuitive. What's the point? The small enterprises active in the north-east sell them to larger ones (mainly located in the north-west) who, in turn, sell them abroad.

the north-east is more globalised than the north-west even if the standard indicators show the contrary?" To avoid this sort of difficulty, Mr Giovannini prescribes analysis of sectors or businesses, particularly if we want to strive towards good, reliable data.

It is also difficult determining the extent to which a country's performance is due to globalisation. The OECD addressed this issue when it got down to work on the manual but put it to one side because of the difficulty in obtaining models to identify and estimate effects.

### Footing the bill

So much for the methodological impediments. There is also the nitty-gritty issue of resources, about which Mr Giovannini has no problem airing his views, drawing on a sort of comparative 'statistical resources history'. "Our main problem today is resources", he affirms. "If we go back to the years after World War II, there was a common effort to establish national accounts, implement new surveys and instruments, annual and quarterly surveys because of the enormous need to rebuild countries from the rubble. There was plenty of money sloshing around both at the national and international levels to provide the necessary resources.

"Today, we are perhaps facing a similar situation in terms of the not unsimilarly extensive mutations in our societies – typified by globalisation and ICT. But our resources dwarf those of the post-war period. In particular, many countries' statisti-



**Enrico Giovannini** (45) knows full well what globalisation means. Working in Paris at the OECD, he commutes each weekend to Rome to be with his family. Not a statistician – in the strictest sense – but an economist, he started out at Istat in 1982 in the area of national accounts. After becoming Director of National Accounts, he then did a stint as Director of Economic Statistics.

Looking north, and stepping into the third millennium, Paris was his next destination on 1 January 2001 at the OECD as Chief Statistician. In particular, he is the Director of the Statistics Directorate and, as Chief Statistician, he coordinates all statistical activities carried out in other 'substantive' directorates. In 2001, he launched a 'new OECD statistical strategy' to improve the quality of OECD statistics and to enhance the efficiency of the OECD statistical system.

"It is clear that the impact of the international economic cycle is higher for the north-east than for the north-west because, through larger enterprises, smaller ones are largely affected in their cycle. Does it then mean that

cal offices have seen huge budget cuts in the last decade as a consequence of fiscal squeezing.

In fact, while the Maastricht convergence criteria were good for European integration, it was to mean a different story for statistics. Statistics has become a high priority in theory, but a sort of last priority in practice. And this, just when we need to develop new concepts and instruments to adapt to our changed world.

"Although we are getting more resources to finance

tion and the development of ICT techniques have been making statistical organisations think about setting up a global statistical system for some years now, and it is already taking root. But, what would this 'Worldstat' or 'Globestat' look like and what would its impact be?

Mr Giovannini elucidates: "I don't think it will be a physical organisation based somewhere governing statistics, but rather a state-of-the-art system – combining international fora and ICT – for sharing databases and ideas

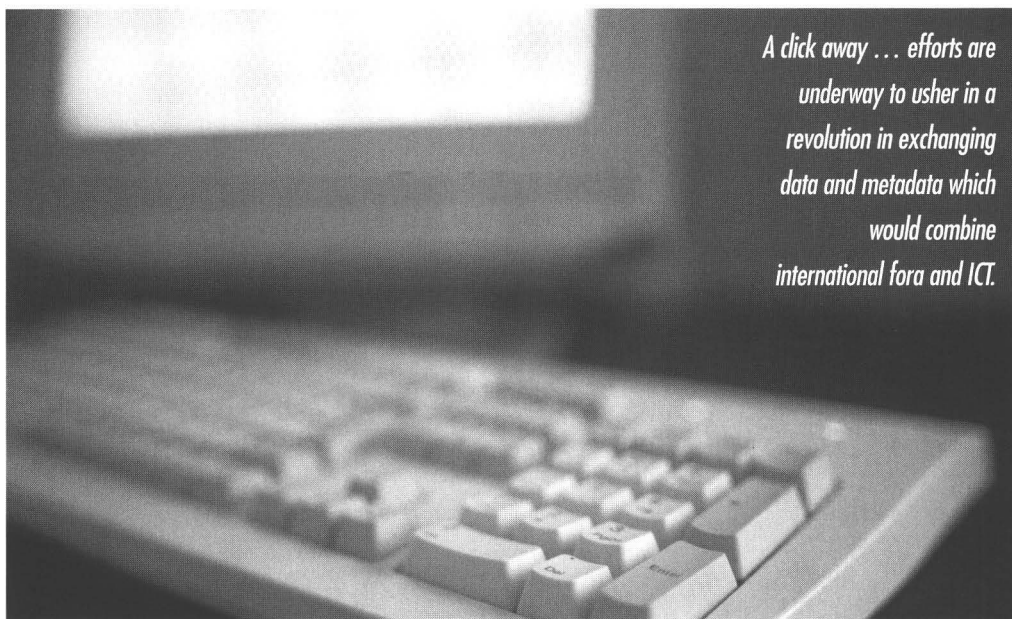
business practices in statistical information that would allow more efficient processes for exchanging data and metadata.

The target is to explore common e-standards and standardisation activities to promote efficiency and avoid duplication of work not only for the organisations behind the initiative but for everyone – public and private – involved in the field of statistical information. According to Mr Giovannini, this would mean a "revolution in exchanging data and metadata".

Eurostat – we have to base our work on consensus and the quality of our proposals and work. Indeed, people feel free to discuss new ideas in a mutually supportive environment, free of binding agreements and regulations, and so on.

## Rome wasn't built in a day

"This helps us search around for "not yet official statistics" – especially in emerging issues where the official variety is thin on the ground – and offers a way of nudging official statistics forward, admittedly with some risks. Electronic commerce is a good example. The first figures presented by some business associations seemed to show that B2C (business to consumer) trade accounted for a significant part of consumption. This was their stellarly spectacular version. Now, in countries where you have electronic commerce statistics up and running, according to common standards and definitions, you have a much lower and more down-to-earth 'O.something' figure. This brings home the fact that you have to use all the information available – even of poor quality – to encourage the development of reliable surveys."



*A click away ... efforts are underway to usher in a revolution in exchanging data and metadata which would combine international fora and ICT.*

more projects, the main problem is that they are often granted for a given timeframe, corresponding to governments' policy information needs, in which there is no time to provide satisfactory results because of legal hiccups and methodological quandaries. What we need is long-term investment for new statistical infrastructures."

## Introducing 'Worldstat'

Well, maybe, but let's not get carried away ... Globalisa-

according to common standards, developing common infrastructures such as glossaries, methodologies and metadata. Basically, thinking globally."

Work along these lines is already underway. The Bank of International Settlements (BIS), the European Central Bank (ECB), Eurostat, the International Monetary Fund (IMF), the OECD, and the UN Statistical Division have teamed together in a task force called SDMX – Statistical Data and Metadata Exchange – to focus on

## Where freedom is good

Generally, it is widely acknowledged that the OECD enjoys a reputation for collaboration at international level, working closely with Eurostat, the IMF and the UN Statistical Division. And, according to Mr Giovannini, this situation is *actually* aided by the comparative advantage it enjoys in having no legal capacity to impose demands on countries. Sounds strange? Mr Giovannini elaborates: "because we don't have much legal clout – unlike

Mr Giovannini knows full well that his ancestors' empire took some time to build, just as he accepts that globalisation statistics won't be built up in a day. But he is still a little impatient. He acknowledges the progress made so far, but there is still much to do. His last plea: "More resources and a long-term vision, please". Clearly, the tomorrowland of globalisation statistics depends on this twin request, and fortune usually has the habit of smiling on the best prepared. ■



Last but not least, **PAOLO PASSERINI** of Eurostat's direct investment unit takes a quantitative snapshot of FDI and explains what this fashionable abbreviation is all about.

## How can FDI help us?

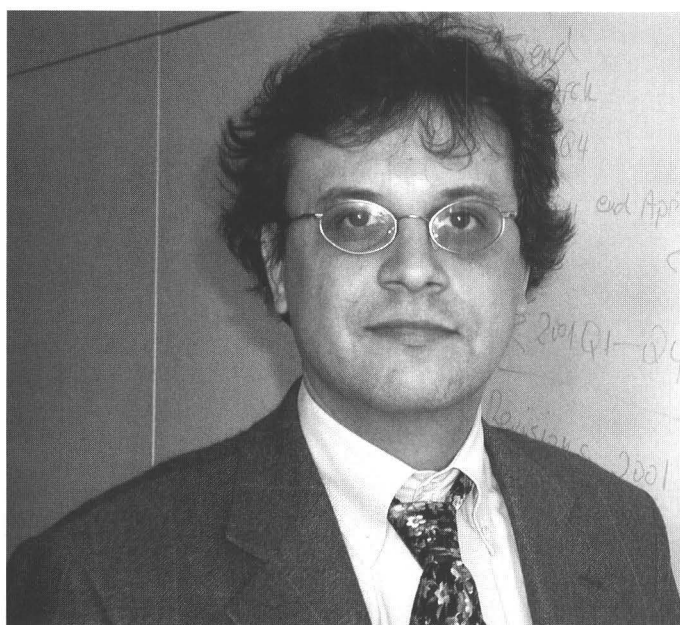
The second half of the 1990s and the year 2000 saw a prolonged wave of international mergers and acquisitions that pushed FDI capital invested worldwide to unprecedented highs. In search of competitive advantage and new profit opportunities, firms have been increasing their scale internationally, forming new strategic alliances and acquiring privatised public enterprises in developing countries.

All sectors of activity have been touched by this surge in FDI, but financial intermediation, telecommunication and business services were activities in which direct investment was particularly intense. 2000 FDI will, however, represent a relative peak of this investment wave, as available statistics indicate a slowdown of activity in 2001 in a general context of a less favorable investment climate.

### EU as the main actor

FDI statistics show that the EU is playing a major role in this process. Peaking in 2000 at 362 bn EUR (4.3% of EU GDP), EU FDI outflows were in recent years consistently close to half of the world total<sup>1</sup>. Between 1995 and 2000, the stock of FDI capital invested in EU affiliates located outside the EU tripled. At the end of 2000, the EU had overtaken the United States in terms of FDI stocks abroad and held a value equivalent to 18.5% of its GDP (some 12% for the USA).

Over the same period, the growth in FDI stocks invested in



*"... what emerges is the increased interdependency and reciprocity ..."*

the EU by extra-EU multinationals was also strong (20% per year on average), although it remained below that of stocks abroad (27%). At the end of 2000, the EU had a positive net FDI position of 432 bn EUR.

The majority of FDI funds received by Member States came, however, from other Member States, especially in 1999 and 2000 when *intra-EU* investment reached exceptional levels of 4.2% and 7.7% of the EU's GDP respectively.

### What's the message?

Apart from showing the overall quantitative aspect related to the extraordinary growth in the amounts of capital invested, FDI statistics can be used to grasp some interesting characteristics of the present phase of development in international investment, particularly of the EU.

### **FDI tend to concentrate within developed countries**

With a share steadily around 90% of the total, developed countries have traditionally been the main suppliers of FDI capital, but their importance as recipients has also grown considerably since 1998. The share of investment received by countries outside the OECD fell and reached a minimum at 32% in 2000, having stayed at approximately 50% before 1998.

### **The big players: EU and USA are becoming stronger while Japan is losing ground**

Within developed countries, the importance of the USA as a recipient of FDI flows increased substantially during the '90s, peaking at 41% of the world total in 1999. With this evolution, the USA

reversed their traditional role of main net world supplier and became a net recipient of FDI flows. The great majority of this investment came, in fact, from the EU, whereas the growth of Japanese investment was much slower.

As a result, what emerges is the increased interdependency and reciprocity between the EU and the USA concerning FDI relationships. At the end of 2000, the USA held 60% of FDI assets invested in the EU, and the EU held 65% of FDI assets invested in the USA. This happened in a general context in which FDI activity is polarised (one way or the other) around these two major players, while Japan plays a less important role than it did in the recent past. In 1996, Japan held 15% of the FDI stocks invested abroad by the Triad, while in 1999 it had only 8%.

## What is FDI?

Although they do not give information on the activity of the affiliates in which capital is invested (see article on page 27), statistics on FDI are one of the more complete and timely indicators on the evolution and direction of the investment made by multinational enterprises.

Data for the EU aggregates and for the Member States are available on an annual basis for both inward and outward investment for the period 1992-2000. Data are disaggregated by partner country (investor or destination country for inward and outward, respectively) and by sector of activity.

Within balance of payments accounts, FDI is distinguished from portfolio investment and from other types of investment because it requires the investor's intention of holding a lasting interest and at least a certain degree of influence in the management of the enterprise that is acquired. An international investment is thus conventionally classified as FDI if the investor acquires at least 10% of the enterprise's equity capital.

However, once the relationship with the affiliated enterprise is established, all types of capital subsequently supplied by the mothercompany (or direct investor) or by other affiliates of the mothercompany are recorded as FDI – including debt financing between affiliates of the same owner and non-distributed profits made by the various affiliates that are directly or indirectly owned.

FDI statistics exist for:

- ▶ Capital flows: value of capital invested during the year.
- ▶ Stocks: value of accumulated capital held invested at the end of the year.
- ▶ Income: profits made by the affiliate, which are recorded as a proportion of the percentage of the affiliate's equity capital in the hands of the mothercompany.

## Can we do better?

Although EU FDI statistics have certainly reached a high level of quality, the ever-increasing complexity of group structures and financial arrangements put in place for financing international investment poses important challenges for FDI statisticians.

The detection of indirect FDI links, necessary to assure a full coverage for direct investment variables, requires detailed and updated information about the ownership structure (above the 10% threshold) of multinational enterprises and groups of enterprises.

The difficulty of the task and the intrinsically transnational nature of the subject matter require additional cooperation and exchange of information on the part of statisticians, both inside their national countries and between different countries.

The role Eurostat is already playing is to act as a catalyst in this process: inside the EU, to foster cooperation and exchange of information inside and between Member States; outside the EU, in the relations with other international organisations active in this statistical field, such as the OECD and UNCTAD.

Because one thing is very clear: measuring globalisation requires sharing statistical information internationally much more.

the aftermath of the financial crises and gradually resumed afterwards.

## Intra-EU FDI is a powerful engine for EU integration

The years 1999 and 2000 – immediately after the introduction of the single currency – were boom years for *intra-EU* FDI, marking a clear acceleration in this dimension of EU economic integration. Big operations related to mergers and acquisitions significantly reshaped the ownership structure of major EU enterprises, particularly in telecommunications and financial intermediation. In 2000, the acquisition of the German telecommunication giant Mannesmann by the British Vodafone Air Touch involved an investment of above 170 bn EUR – the highest amount ever registered for a single deal.

## EU investments to other countries concentrate in selected areas

Looking at the investment by the two major world economies in other countries shows that there were some areas where FDI grew at very fast rates and others

in which it substantially stagnated. Among the former, South America and the group of 13 Candidate Countries clearly stand out as far as EU investment is concerned. Between 1996 and 2000, the growth in FDI stocks held by the EU was in both cases around 400-500%.

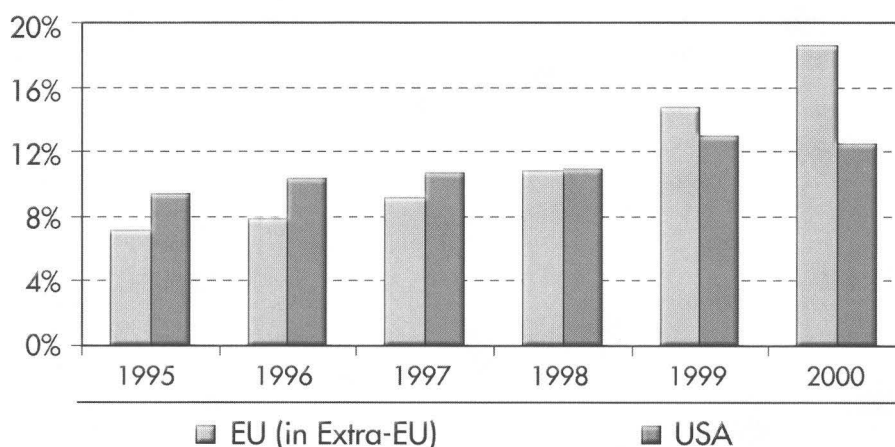
However, growth was much slower in Africa as a whole (with the exception of some Northern African countries) and even slower in Oceania, with both continents coming to represent a marginal part of EU FDI assets at the end of 2000. Investment to Far East Asia halted in 1998 in

## Services are increasingly dominant in FDI

The major tendency displayed by FDI data by kind of activity is the increasing dominance of the services sector as the preferred target for foreign investors. Representing already 60% of end-1999 stocks, services accounted for 74% of 2000 investment flowing to the EU. Besides financial intermediation and telecommunication services, investment in the EU trade sector was also sustained.

On the outward side, a similar tendency could be observed, although the relative weight of services was still 50% of stocks at the end of 2000. Moreover, there was important investment in utilities (electricity, gas and water) held in developing countries by EU multinationals, and in the primary sector (mining and quarrying activity).

## FDI stocks as a percentage of GDP – EU and USA



Source: Eurostat, BEA

1. Intra-EU FDI (ie. investment from one Member State to another) is treated separately and excluded from world totals and EU data.

In anticipation of the next wave of enlargement, *Sigma* starts a new series of profiles. From now on, each issue will contain profiles of two statistical offices of future EU members, to help readers understand the systems and meet the people that will help shape tomorrow's statistical system.

Poland – the biggest of the Candidate Countries – was the first on our map. *Sigma*'s Barbara Jakob met **TADEUSZ TOCZYŃSKI**, President of GUS, Poland's Central Statistical Office, in Warsaw.

**W**hen the iron curtain between western and eastern block countries began to crack in 1989, nobody could have possibly imagined that the course of events would pick up such high speed. What was clear, however, was that – given the complete change from one system to another – a rocky road would lie ahead of statistics to adapt to Western standards.

When Eurostat's Director-General, Yves Franchet, first visited GUS in 1989, Poland's application for EU membership – which was putting further pressure on the statistical system to adapt quickly – was not yet a matter of discussion.

Today, thinking of the unfavourable starting point, one can only acknowledge the willingness to learn and adjust, and the speed at which this happened. The Commission's report on Poland's progress towards accession recognises that although a few areas remain in which further work is required, "Poland is well advanced in the field of statistics".

Talking to the President of the Polish Central Statistical Office (GUS), Tadeusz Toczyński, one rapidly learns that it is their pride to adjust swiftly. "We are very keen on doing all the work required to bring our statistics into line with the *acquis communautaire* and avoid making use of transformation periods."

## Statistics Poland – ready for take-off



*Plac Zamkowy – the entrance to the old town in Warsaw, which was destroyed in World War II and rebuilt*

### Making a fresh start

"It was a tough start", Mr Toczyński admits, "for the first five years of cooperation, we were doing nothing but listening. For quite a while, there was mainly one-sided technical assistance and we were unable to contribute to discussion."

The difficulties that Polish statisticians had to face during these first years were of a diverse nature. First of all, the statistical language used in Eastern and Western European countries differed

widely. This terminology question was an additional obstacle for understanding each other and generally added to the language problem. When it came to visiting Eurostat for the first time, Mr Toczyński recalls that a major difficulty was the question whether someone could accompany him, capable of discussing methodological questions in a foreign language.

That was the past. Today, around 400 people are able to converse in foreign languages and join working parties and seminars all over

Europe not only because they have profited from training courses but also because they have invested a lot personally and worked hard to catch up.

### Shock strategy

Introducing about 30 classifications relevant for EU statistics was another major challenge, as Mr Toczyński explains, which added to the requirement of dealing with sample surveys – something rather unusual in statistics for the planned economy where exhaustive surveys predominated. That said, exhaus-



tive surveys were undoubtedly much easier to carry out – with a total of around 80 000 enterprises – than today where there are some 3 200 000 economic units.

The course of events – the Polish economist and politician Leszek

Balcerowicz prescribed the shock strategy for the economy with the effect of a quick increase in prices – determined the statistical priorities. So, price statistics were adjusted first in order to be able and measure the tremendous inflationary pressure in those days. During the

price shock, GUS provided new inflation figures every ten days.

The second priority, to get acquainted and learn everything about national accounts, was a conscious decision. Although GUS had always provided national accounts data to the United Nations, the common system in planned economies was the Material Product System (MPS) – a completely different approach to national accounts.

National accounts are said to be the heart of statistics and GUS shared this view. So the first decision was to get the manuals translated and the staff trained in national accounts methodology. Certainly a very wise decision – today, national accounts are regarded as one of GUS's strengths.

"We also had to get used to the fact that our main user was no longer exclusively the government but the society at large", Mr Toczynski says, adding, "all in all, we didn't have *that* many difficulties adjusting. Our office was, already during the communist regime, rather independent and the interventions of the statistical agency in Moscow, which coordinated all statistical activities, were limited to standard classifications and ensuring statistical comparability. We were not as cut off as one might think."

### Helping and being helped

Now that the changeover of statistics has been successfully managed and European partners certify that Poland is no longer an apprentice of Western statistical methods, GUS feels that it should pass on what it has received in terms of technical assistance and help others. In fact, GUS provides assistance to a number of former Soviet countries such as Russia, Belarus,

Kazakhstan, Ukraine, Armenia, Georgia and Azerbaijan.

GUS has profited, itself, from a number of bi- and multilateral statistical cooperation projects and from technical assistance under the Phare programme. Initially created in 1989 to support reforms in Poland and Hungary, it became the EU's general aid programme to countries in transition and an instrument to support the pre-accession strategy. In this framework, GUS worked, for example, with INSEE on regional statistics, and is starting a project with the Federal Statistical Office of Germany (Destatis) on statistical information systems covering a number of statistical fields. It has also worked closely with the US and Canadian statistical services.

### Taking wings

The best proof of successful transition is that relatively few statistical fields remain untended. Intrastat is one of these areas, but naturally, since it is the system to replace the customs declaration for trade statistics within the Common Market, it cannot be introduced until the moment of accession.

However, Mr Toczynski reports that they are doing everything to be well prepared. Legislation on administrative aspects such as the distribution of tasks between ministries and the statistical agency is underway. The technical and methodological aspect needs further attention, and GUS hopes that Eurostat will soon publish a manual describing the procedures of all EU countries so that it can emulate the best practices for its own system.

And Mr Toczynski is very confident that GUS will be able to cope with all the difficulties that might arise. Not only can they



### "There's nothing exciting about it",

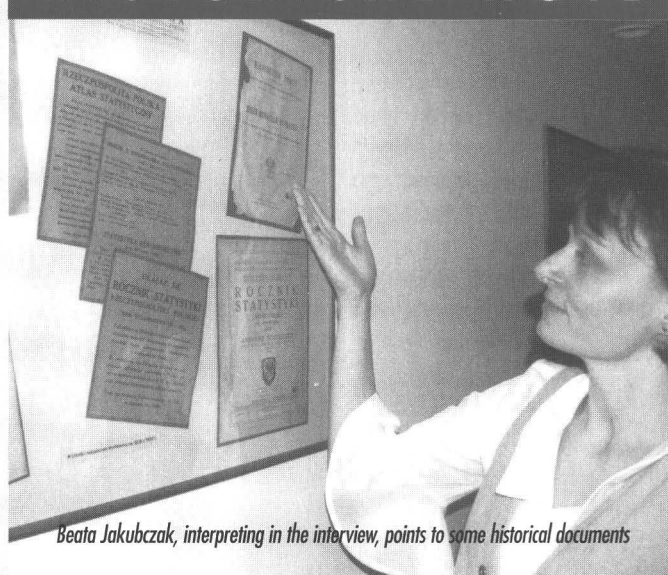
Tadeusz Toczynski says modestly when I ask him about his career.

After graduating from the Central School of Planning and Statistics in 1974, Mr Toczynski stepped directly into official statistics working in GUS' industry statistics division where he was mainly occupied with analytical work.

At the beginning of the 80s, he gathered experience at the UN Statistical Commission and the General Economic Analysis Division of the UNECE (Economic Commission for Europe). Returning to Poland three years later, he started to climb up the ladder step by step, first as Head of Section, then as Head of Division and, later, as Vice-President with a pause from 1992 until 1995 when he left the world of official statistics and dived into the world of private business.

In 1996, he followed the call of the Government to become President of the Central Statistical Office. His second and last term – the Polish statistical law provides for a maximum of two terms of office – will last until 2008. Until then, he hopes to have lifted Polish statistics to a level above the European average – an ambition which his principle, "never stop learning", doubtlessly helps to achieve.

## HISTORICAL NOTE



Beata Jakubczak, interpreting in the interview, points to some historical documents

The history of Polish statistics is closely connected with the political history of Poland. Today's statistical office finds its roots in the establishment of the Central Statistical Office (GUS) in August 1918, just before Poland regained independence – which only lasted 20 years – after more than one century of occupation.

Statistical tradition, however, is much older than that and goes back to a population census in 1789, among the first to be conducted in Europe. The beginning of the 19<sup>th</sup> century saw the establishment of the Statistical Bureau of the Kingdom of Warsaw – which could be seen as the predecessor of today's GUS.

fall back on the experience of the EU countries, the trade data in the planned economy were also directly collected from companies with a system quite similar to Intrastat. In addition, Intrastat is also subject of cooperation projects with Destatis and Statistics Sweden.

Agricultural statistics is another area requiring further adjustment and, in some cases, expansion, given the importance of agriculture in EU policy and the role it plays in the Polish economy.

### Independent yet dependent

Other sectors such as public finances are subject to cooperation between GUS and other government institutions, more concretely, the National Bank and the Ministry of Finance. Progress here often depends on political decisions to be taken, eg. on the tax or fiscal system, or on methods and classifications to be applied. For example, the Ministry of Finance is currently working on adjusting the calculation methods for the non-financial accounts of government institutions to European standards, and the Ministry

of Internal Affairs and Administration is responsible for implementing a central register of vehicles, which GUS intends to use for transport statistics.

Apart from public finances, the homework in national accounts is done. GUS provides annual and quarterly national accounts data in line with ESA95 (European System of National Accounts, 1995 version) methodology including an estimate of the non-observed economy. The methodology being consistent, GUS is now fine-tuning certain aspects such as the seasonal adjustment methods of GDP and aims at reducing the time lag in delivering the data to Eurostat, which is currently several days behind EU Member States.

GUS' President seems to be well aware of the weaknesses of Polish statistics and makes no attempt to sweep them under the carpet. He points to another crucial aspect in modern statistics, the use of registers. Although he assures that enterprises don't explain about the response burden being too high as is the case in Western European countries, the use of administra-

tive data is an important priority for the years to come.

A large load is taken off the back of respondents at the end of the year when the last old product classification will be abolished and replaced by an EU-compatible one. Businesses are no longer forced to use two different product classifications, which is currently the case because the old classification is still valid for tax purposes, whereas it has been replaced in all other fields.

But alleviation on one side is accompanied by aggravation on another. The administrative business register REGON, which is currently used for statistical purposes, is to be replaced by the end of the year by a court register with reduced information.

This means a significant challenge for GUS, which is in the process of creating a statistical business register based on information from administrative sources. Along with finding alternative sources for some information contained in REGON, matching data from different administrative sources using a unique identification code are the most crucial aspects –

A first yearbook, *Statystyka Polski*, was issued in 1915.

The diverse partitions of Poland between its neighbours Russia, Austria and Prussia, political upheavals and the two world wars made a linear development of Polish statistics extremely difficult. Yet Poland has a rich statistical history – a wide range of historical references that GUS presents in its library date back to between 500 and 600 years.

Interestingly, statistical publications at the beginning of the 20<sup>th</sup> century were issued both in Polish and French.

problems not so much different from those encountered in EU countries.

The difficulty in making full and optimal use of the information contained in administrative registers seems to be less the access of statistics to these sources – the Polish statistical law provides for this – but their coordination and the sheer number of different sources.

### An almost perfect match ...

Mr Toczyński's working priorities and the perceptions of their own weaknesses that need to be tackled seem to match with Eurostat's and the Commission's assessment. And moreover, GUS' President can find no discrepancies between the EU's statistical objectives and the national priorities:

"A particular national need was social data. As a heritage of the planned economy we had no social statistics to speak of. Providing such information was therefore an important task, but it was not really in contradiction to the EU programme which, although more focussed on economic statistics, also covers the social area."

## ... with room for improvement

But what he would wish to see is to better coordinate the different demands of international institutions. "Eurostat's needs are clear and they are served first, but the story doesn't end here. There is UNECE, the OECD and others with similar, slightly or completely different requests and we have to deliver data on the basis of a different methodological background", Mr Toczynski explains.

Since this is not an exclusive Polish problem, GUS plans – together with other European statistical offices at their next meeting in Luxembourg – to introduce a proposal for creating a special data network or a one-stop-shop, from which these international requests would be satisfied, a kind of unified system of local databases, which would be fed by the NSIs.

At European level, Mr Toczynski sees further room for enhancing the comparability of data and turning more to

the use of common concepts rather than ex-post harmonisation. Looking at best practices and learning from the predominance of certain offices in some areas is for him more a chance for progress than a threat to individual identity.

"The work in the working groups should be more focussed and problem-oriented and, above all, more efficient", he claims. "Creating working groups of leading countries which deal with specific topics would certainly lead to such efficiency gains.

Thinking of an enlarged EU with more than 20 member countries, it seems reasonable and vital if we want to avoid becoming a clumsy, immovable body."

Tadeusz Toczynski is certainly a European by conviction and somebody who is ready to invest himself fully in the process and play an active part in designing a common European future for statistics. And there is one more lesson to learn from this interview: modesty and self-confidence can be good bedfellows. ■

## Facts and ...

The main, although not the only, producer of Polish official statistics is the Central Statistical Office (GUS) which is at the heart of the statistical system. Ministries and the National Bank are other actors providing certain types of statistical information. GUS's president, who is directly answerable to the Prime Minister, fulfils a coordinating role in preparing a draft statistical programme and developing classification standards and nomenclatures.

The statistical law from 1995 sets out the responsibilities of the president of GUS and the provision for a Statistical Council. As an independent opinion-making and advisory body whose members are appointed by the Prime Minister, it makes recommendations to the draft annual programme set up by the president of GUS (containing around 250 statistical surveys) and advises the Prime Minister on statistical matters.

Statistics in Poland are well embedded in legal provisions which regulate all official surveys in detail. Each statistical inquiry, change of programme or standards requires a legal instrument and is subject to parliamentary control. This also implies that the budget is strictly laid down and allocated to specific purposes and surveys. Commissioned work is also possible but plays a marginal role for the time being. The regular budget for GUS is around 65 million euro and higher when – as is the case this year – censuses are carried out.

## ... figures about Polish statistics

With around 7 400 staff, GUS is a fairly large organisation – larger than most Western European countries are accustomed to. Almost 90% of staff work in the regional offices which are represented in each of the 16 Polish voivodships. GUS also has its own statistical computing centre, publishing house and two training centres.

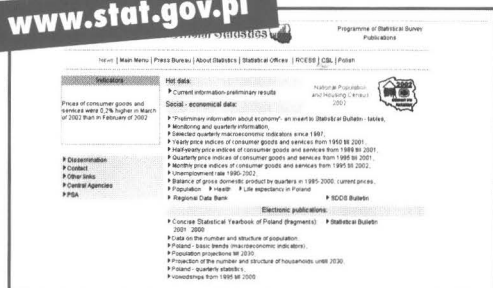
The regional offices, under the direct responsibility of the president of GUS, conduct the surveys and carry out other basic statistical operations. But as a specific feature of the Polish system, each regional office is also responsible for a certain aspect of statistics, which is undertaken in coordination with the appropriate division of the central office.

Population	38.6 mio		
	Statistical system overall	GUS central office	Regional offices
Number of staff	7 361	825	6 536
Share of women	84%	78%	87%
Tertiary education	33%	71%	29%
Staff aged 30 and below	18%	16%	20%

GUS shows a very active dissemination activity using all modern media such as the Internet, CD-ROM and paper. For a few years now, all basic statistics are published in two languages, Polish and English. Following its policy of statistics as a free basic service and the fact that statistical data should, therefore, be free of charge, the price for publications usually covers publishing costs only.

Recruitment problems, which could arise because payment in official statistics is not as attractive as in the private sector, are currently being outweighed by relatively high unemployment – and the President's private management approach: "Respect people's different characteristics while encouraging openness for everything, because we need specialists with a comprehensive way of thinking."

[www.stat.gov.pl](http://www.stat.gov.pl)





Travelling westwards, our next stop is the Czech Republic where **MARIE BOHATÁ** – President of the Czech Statistical Office (CZSO) – spoke to *Sigma's* Glen Campbell.

## “No learned person falls from the sky”

**P**rague is a city brimming with contradictions, of which the most conspicuous is perhaps the urban landscape.

On the one hand, Charles Bridge, the Castle and Wenceslas Square offer a feast for the eyes. But on the other, not far away from the historical centre, there are backstreets of non-descript houses and high-rise flats where economic hardship makes its presence felt.

The Czech Statistical Office finds itself in just such an area. And it occupies very humble offices.

But looks can be deceiving. Behind this humble facade, I discovered a hive of activity and excellence – testimony to the Office's determination to produce quality statistics for the Czech Republic and in preparation for its forthcoming accession to the EU.

Like other former Communist countries, the Czech statistical system has seen its fair share of changes since the fall of the Berlin Wall – following the sweeping political and economic changes with the country's switchover

from a planned to a market economy. And it has had to rise to a great deal of challenges as a result, from over-arching legal and organisational issues right down to data collection techniques and data sources.

*acquis*; and allowing for some historical comparability. Quite a tall order. But they've done it.

The Czech statistical system already complies with the bulk of the statistical *acquis*

### Team work

Of course, as the Czech proverb in the title suggests, it was no mean feat getting there. Ms Bohatá shows no shame in saying that their lesson books were open all the time, adding that the Phare Statistical Programme class notes on technical assistance were well thumbed, particularly for its preparations for EU membership. Like other Candidate Countries, the CZSO hasn't been alone and "left to get on with it". Far from that.

Indeed, Ms Bohatá congratulates Eurostat on its supportive work in terms of technical assistance and facilitating exchange of experience on bi- or multilateral bases, and on its partnership approach. Says Ms Bohatá: "We have always been seen as part-



*Prague's historical centre*

According to Marie Bohatá, their transformation has boiled down to three main goals: meeting the information needs of a democratic society and a market economy; developing statistics in line with the EU's *statistical*

and is expected to comply with everything by the end of this year. From statistical coverage to modern dissemination techniques – you name it – Czech statistics will compare well with the systems in the current EU Member States.

ners, never as students at the back of a lecture theatre. And this has been very important psychologically for us in our work". In addition, she also adds that working with other Candidate Countries has been a bonus part-

ticularly for avoiding the mistakes made by others.

So what have some of the problems been? Ms Bohatá is quick to refer to the census that provided the first full-blown test of the statistics system. One large mountain to climb was data protection where conflicts arose between the law on the census – censuses require a special law in the Czech Republic – and the infant law on data protection. They had to go to the constitutional court, and the problems are

still unsolved – with implications for what statistics the system can and cannot collect.

### A lesson in public and media relations

Apart from legal quandaries, the census provided the Office with the first opportunity to present itself above all to the public, and was a real test particularly in terms of winning public confidence on data confidentiality and working with the media.

Despite the Czech Republic's long and respected tradition in demographic statistics and the CZSO's efforts to obtain positive media coverage, the press and television mounted a very negative campaign against the census, fomenting distrust among the public at large – a problem compounded by the fledgling but fuzzy legal framework.

But Ms Bohatá recognises full well what went wrong in the run-up to the census: "Looking back, we weren't prepared enough in terms of dealing

with the media and the public, anticipating their queries and fears. Instead, we foolishly waited until the problems came to the surface – attracting unfair flak. But in a way, we could say that it was a crisis waiting to happen. One of the legacies of the former centrally planned regime was exactly this lack of information activity. We just churned out data with little thought about the users and respondents themselves."

But the CZSO was not going to let the media pull the plug on the census so lightly. Ms Bohatá rose to the challenge, personally appearing on the evening news with carefully crafted and articulated declarations to the media along the lines of "I guarantee your data will be protected".

What's more, as a result of unforeseen problems in data collection, she also went to the data collection points, where people could personally hand in their completed census forms, to speak to respondents and win their trust.

After the census, the office also plucked up the courage to have a poll conducted asking respondents two questions, roughly translating as: "Do you see the survey as an interference of the Statistical Office into your privacy" and "Are you confident that the Statistical Office will protect your data". To the CZSO's satisfaction, the results obtained drastically improved from answers given before the census, with substantial positive shifts in the confidence of young people.

Such contact, clarity and solemnity obviously paid off very handsomely in trust-building; the media and the public finally came round to accept that the CZSO could keep their person-



**Marie Bohatá** is the first woman to make it to the highest rank of manager and the first female president at the CZSO – an accomplishment when you consider that, although the statistics offices of the former Communist Candidate Countries had many women staff, management posts were usually occupied by men.

The motivation for her taking up the post of president, says Ms Bohatá: "I wanted to make statistics more user-friendly and boost the analytical and interpretative role of Czech statistics. As a newcomer or outsider, or both, I thought that I could relook at "things that have always been done that way" and ask questions that colleagues on the inside may not have been to see in the same way".

With an econometrics degree and a PhD up her sleeve, Marie Bohatá has pursued an energetic career in economic, research and business circles, working in research and economic institutes in the Czech Republic. She is also Associate Professor for Economics at Prague's Charles University. Her pet subject is business ethics to which she has contributed widely at national and international levels.

Speaking commendable, self-taught English, she is classical music-lover, enjoys hiking and mushroom picking. With Prague's constant flow of music festivals and plenty of woodland, what better way to wind down after getting Czech statistics ready for EU accession!

## Facts and figures

The Czech Statistical Office (CZSO) exists at the core of the State Statistical Service, set up by the State Statistical Service Act in 1995 and independent from government.

Functioning in a decentralised system, the CZSO works alongside the Czech National Bank (responsible for monetary and balance of payments statistics), the Ministry of Finance (responsible for government financial statistics) as well as a handful of other agencies.

Playing a vital coordinating and methodological role, the CZSO is responsible for preparing, with the appropriate ministries, the pro-

gramme of statistical surveys and is responsible for classifications, nomenclatures and the methodology of statistical surveys. It comprises four so-called 'sectors': Statistics; Administrative; Statistical System Development; Regions and Information Outputs.

After administrative changes and streamlining in the statistical system's network, the CZSO now has just regional offices in each of the country's 14 administrative regions. The regional offices are responsible for dissemination and fieldwork, and will provide statistical support to the regional authorities. In addition, there are six nationwide processing departments which each look after data processing for a specific topic, eg. agricultural statistics.

## Key statistical data

**Population: 10.3 million**

**Staff:**

State Statistical Service (overall): 3 700

of which CZSO 1 866

of which regions 1 176

Average age: 45 years

Women: 75%

of which in management positions: 47%

Graduates: 31.5%

al data under lock and key. She hopes to build on this experience for winning the public's support especially for social data – an area that depends on household surveys and households' participation. And an area in which they still have some way to go in redesigning the Household Budget Survey (HBS) and developing social protection accounts.

### From listening to users ...

Learning to listen to users was also a novelty, Ms Bohatá

explains. This is where the Czech Statistical Council comes into play. Established by the State Statistical Act, it is the CZSO's advisory body and includes members from ministries, academic institutions, business and 'experts in statistical theory and practice'. But as Ms Bohatá emphasises, "it still has some teething problems such as the absence of trade unions and NGOs". Their goal is to enlist their participation.

The Council's chief role is to advise on the programme of surveys and on other basic

statistical issues. In addition, as part of the CZSO's user outreach strategy, it is also conducting a special survey among users about their requirements, and meets regularly with trade associations and ministries.

### ... to accountability and impartiality

The role of the Czech Statistical Council raises, for Ms Bohatá, the question of accountability. In her view, it could play a greater role: "If we really are serious about

being independent, we need to step back and ask ourselves whom we are accountable to. Is it the general public? In our Statistical Act, no responsibilities of the Council are defined. So far, the Council has just been an advisory body, but we could be made accountable to it."

According to Ms Bohatá, the statistical system enjoys full independence, free from political interference: "We only go to our government for budget purposes; no more is asked of us." However, she admits that the lack of a civil service law regulating appointment, employment and dismissal is a major shortcoming. Currently, she is appointed by the President of the Czech Republic on the basis of a government proposal, but she can also be fired by him if the government proposes.

Moreover, the question of presidency terms has been discussed and she suspects that a fixed term presidency is more effective: "It seems that everything in statistics takes some time. It took me two years to see what the statistical field was about, also because I was an outsider. You clearly

**ČSÚ** ČESKÝ STATISTICKÝ ÚŘAD  
CZECH STATISTICAL OFFICE

30.04. 2002 Regionální rozdíly ve struktuře zaměstnanosti  
26.04. 2002 Souhrnný indikátor divny mimi poklesl  
26.04. 2002 Výroba vepřového masa se snížila  
26.04. 2002 Sazební vybraných cen  
24.04. 2002 Sdílení EŠU  
23.04. 2002 Měziroční pokles pasiva obchodní bilance

Inflace, inflace, inflace...

**Elektronický sběr dat**  
Dozvíte se o výhodách tohoto způsobu sbíru dat, najdete potřebné informace o programovém vybavení, jeho instalaci a postupu stahování elektronických formulářů.

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Prostředí v ČR za rok 2000 (PDF)  
Studie o podílu v prostituce v ČR na hrubém domácím produktu za rok 2000.

**Informace o bytovém fondu v ČR podle předběžných výsledků SLDH 2001**  
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**Před volbami** (ukázka v PDF - 123 / stránka)  
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**Nejoblíbenější jména dětí v lednu 2002**  
Statistika nejoblíbenějších jmen dětí, matek a otců v lednu 2002.

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Nezávislost ČR v letech  
Rychlé a aktuální informace  
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Regionální publikace  
Životní prostředí, zemědělství  
Práce, sociální statistiky  
Obyvatelstvo, volby  
Makroekonomika, HDP  
Zahraniční obchod  
Ceny  
Průmysl, stavebnictví  
Služby  
Metodika  
Sčítání lidí, domů a bytů  
Volby

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# A 'chequered' history

The statistical service of former Czechoslovakia was set up only a few months after the country's declaration of independence in 1919. Between the two world wars, the service went from strength to strength with almost half (!) of its effort devoted to scientific and theoretical activities in the 1920s and 30s.

However, this bright, promising heyday was only to occupy a small portion of the last century, with things taking a negative about-turn in the war and the ensuing Communist regime. For some four decades, this twenty-year old statistical service would receive repeated, damaging blows. Under the Soviet regime from 1948, the statistical office was merely assigned the organisatory role of monitoring the performance of enterprises against the economic plan.

Between 1969 and 1992, there were three statistical offices with strictly defined powers: the Federal Statistical Office, the Czech Statistical Office and the Slovak Statistical Office. More and more, the political choice was to relegate the basic principles of statistical work to the backseat; unsurprisingly, the quality of statistics was to decline, especially in the area of methodology.

But the political events of 1989 heralded a brighter future for the service. An independent Czech Republic was created in 1993, the Federal Statistical Office was dismantled, and the new Czech Statistical Office assumed the powers and responsibilities of a single national statistical institute. The next major milestone was to be in 1995 with the State Statistical Service Act, which laid firm legal foundations for Czech statistics to take off.

Thanks to the positive turn of events of the last decade, it has been able to salvage and revive its methodological role from the shredding machine of history. This year, they set up the Statistical Development Centre and have earmarked resources for research activity, with around ten people working full-time. On this subject, Ms Bohatá was pleased to say that they had adopted mobile technology, 'handhelds', for fieldwork such as for price statistics, still pioneering work.

need time before you start seeing results – some three years." To iron out the remaining administrative creases, a Civil Service Law should be adopted by the end of this year.

## Young and highly skilled, please apply

Looking at the CZSO's staff points the spotlight on some of the staffing and recruitment challenges the CZSO is facing. With an age pyramid looking more like a flattened diamond (the average age is 45), a relative skills deficit and a high proportion of women staff, today's mainly three-pronged recruitment policy aims to take on younger and more highly-skilled staff and redress the gender balance.

Ms Bohatá elaborates: "Today's problem goes back to the previous centrally-planned system where our statistical system – mainly monitory in nature – did not require highly-skilled staff. We simply didn't need to construct samples or use sophisticated techniques, so there was no great need for teams of specialists. With so much standardisation and compliance with the EU's statistical acquis, we need more highly-skilled staff – and fast."

Ms Bohatá's task is no mean feat. The state sector cannot easily downsize or fire staff to simply replace them, so this has been a management problem demanding significant diplomacy and orchestration of the various interests involved. What's more, working for state statistics remains unattractive for many graduates who can find better financial rewards elsewhere. Even when they can get hold of young people, they soon leave for private companies.

## Sticky data collection

And what about the issue of data collection? "Our work is totally different now", Ms Bohatá says, pointing to a table showing three more zeros to the number of reporting entities for the business register; before they had two thousand, now there are some two million. This has led to an enormous response burden given the number and exhaustiveness of surveys – a legacy of the past regime. "The response rate didn't used to be an issue, but now it definitely is", she affirms.

Updating the register has clearly become a top priority, all the more so because anything up to a third of the entities registered could be inactive, not speaking of registrations and misclassifications. What's more, the reliability and timeliness of national accounts data have suffered as a result of the weaknesses in the sampling base. The slate, therefore, needs to be wiped clean before ushering in, for example, sampling techniques, which offer a faster, reliable alternative to exhaustive surveys.

But things have been looking up since last January when the State Statistical Service Act was amended. Now, they can improve the business register by accessing some administrative data from tax and social security registers – but not yet tax declarations. "Even this is a big improvement", says Ms Bohatá. In addition to business registers and lowering the response burden, Intrastat is no less a priority, for which access to tax registers will be indispensable.



## Quality matters

Up until now, the CZSO has had its plate full getting its statistical system to stand on its own two feet and adopting the EU's statistical acquis. Only recently, Ms Bohatá affirms, have they been able to focus on processes such as integrating Total Quality Management, in line with Eurostat's Charter of Quality, into their work.

Recently, they adopted an ethical code on staff behaviour and propriety, which also informs the public on how to use the system and is also used for staff appraisal. Here, too, quality management – with all the trimmings of performance targets and appraisals and reports – is new terrain, but it is an issue for which a broad consensus has emerged and that Ms

Bohatá sees as key, given her professional experience in business ethics.

## A few years down the line

Asking Ms Bohatá how she would like to see the European Statistical System develop in the future, she too points her finger – albeit with some reservations – to the US' example as a source of inspiration. "The American model seems to be more flexible, more operational, transparent and cost-efficient than the European one and could serve as a blueprint for the future ESS, especially for certain short-term indicators and national accounts." She believes we should reassess EU regulations with the American model in mind and, therefore, stop harmonising statistics any further

until this is done – only sparing social statistics.

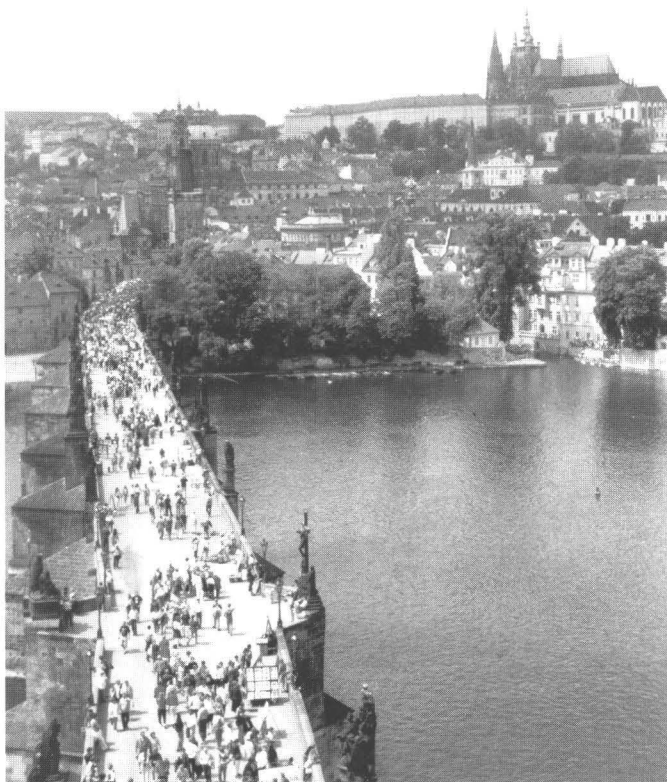
In her view, simplifying national accounts is one sure way forward: "I am not an enemy to national accounts, Ms Bohatá starts, "being an economist, I understand their role. But I wonder if we couldn't streamline particularly quarterly national accounts according to real needs, and all the more so given the cost side of their compilation. In my view, we need to foster more of a 'Europe-first' approach, while taking into account an increasingly globalised world. Without simplification, timeliness won't be improved."

Looking deeper into the crystal ball, Ms Bohatá would also like to see closer cooperation between ESS agencies and possibly specialisation between groups of countries for

sharing work equitably. "Not everybody should have to do the same work" she says, "specialist tasks should be delegated to certain countries according to their skills and specific features."

Lastly, coming back to Czech statistics, she explains her intention of running a satisfaction survey of CZSO staff – for the first time in the Office's history. Her reason: "Trying to introduce changes is my obligation and I would like to use a satisfaction survey to help me just do that. Changes are almost always painful". Changes certainly can be. But our Czech colleagues have demonstrated that the highest mountains can be climbed.

**To find out more about the Czech Republic's State Statistical Service, visit their website at: <http://czso.vse.cz/>** ■



On the eve of the new millennium, the UN and the EU agreed that the time was ripe for a population census. *Sigma* wanted to find out more and asked two European countries – Norway and Hungary – about their experiences with the millennium census round.

We start with **GUSTAV HARALDSEN** and **COEN HENDRIKS** of Statistics Norway, who report how new technologies have revolutionised the most traditional area of statistics, cutting response burden and improving data quality.

# Census goes online

**November 3, 2001 was Census day in Norway, for which household and dwelling data were collected using a self-administered questionnaire for every family in the country. But with a difference: the respondent could choose to fill out the paper form and return it by post or access one of the electronic versions on the Internet. A little more than 10% used their personal computer to complete the questionnaire, with the result that the data quality of these seems to outshine that found in the paper version.**



*Gustav Haraldsen – senior adviser at the Division for Statistical Methods and Standards of Statistics Norway – works mainly with development and design of questionnaires.*

*Coen Hendriks – advisor at the Division for Population and Housing Census – was, among others, responsible for the data collection of the Norwegian Census.*

**B**ecause Statistics Norway provides a 'low-threshold' Internet service, even people with an older browser version should be able to log onto our Internet pages. For the 2001 Census, we constructed one simple HTML version and an advanced version using HTML and JavaScript. While the simple version was simply an electronic copy of the paper one, the advanced version, however, was designed differently.

The respondents were automatically guided through each

question, with quality controls being run in the background for some of the questions. Questions came up one at a time in the centre of the window, with text boxes containing error messages or help texts in the right-hand margin (see figure below).

Respondents could navigate to different parts of the questionnaire using the buttons in the left-hand side of the screen. Using either Explorer 5.0 or 5.5, they were automatically guided to the advanced version, while others were directed to the simple version.

## Electronically, better results

We expected the best data quality from the advanced Web version. We also felt that presenting a picture of the original paper questionnaire on a small screen might be burdensome, and hence diminish the quality of answers. One of the main goals of offering Web alternatives to the paper form is that it could enhance data quality. Therefore, a first question is whether this objective is achieved. Equally important,



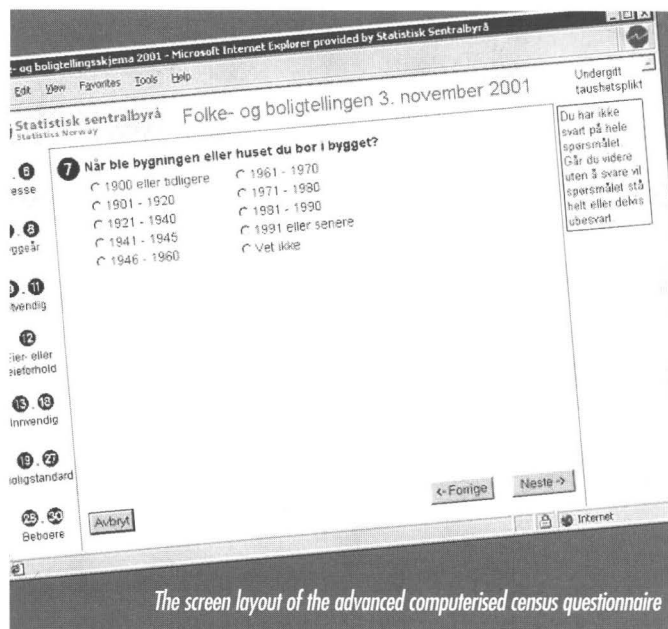
however, is to investigate what the computerised version should look like and how it should function to achieve the best possible result. We will report a few preliminary findings, which shed some light on these questions.

According to a recent survey, a little more than half of the Norwegian population can connect to the Internet from home. Since one in ten forms were returned via the Internet, this means that approximately 20% of those with Internet access answered electronically. For every simple electronic form, there were four advanced versions returned – a clear sign that the majority of the respondents benefited from the features of the advanced version.

## Flash reminders

A perennial problem in statistical surveys is non-response, and it is one that we had to grapple with in the census. There were several questions with a particular high risk of item non-response. Unsurprisingly, the question regarding the period in which the respondent's dwelling was built was one such example. Item non-response was 3% both in the simple and advanced computerised versions, but increased to 9% in the paper version.

What explains the difference? The question above was followed by another about the specific year of construction. In the advanced version the respondent was reminded of the period they had already indicated for the first question. Respondents who tried to skip the follow-up questions were also reminded that the question was not yet answered. The item non-response remained steady at 3% for the



*The screen layout of the advanced computerised census questionnaire*

follow-up question in the advanced version, but increased to 5% in the simple version. In the paper version it increased to 14%.

In a different question block we asked about access to a private or common garden and to a garage or 'carport' or to a private parking space. The questions were phrased as a single question ("Do you have access to..."), with one line for each item. The respondent was expected to tick either 'yes' or 'no' for each item. The item non-response for 'private garden' was 6% in

the advanced version but doubled to 12% in the simple Web version and increased to 34% in the paper version. A similar pattern came up for the other items.

## Squeezing out non-response

The lower item non-response in the Web questionnaires, in general, and in the advanced Web version, in particular, may either be a result of a selection process or of the different instruments. Even based on this preliminary analysis, however, it seems that

the different versions had different effects.

It also seems that the extra effort of implementing advanced features in one of the computerised versions were well spent. In straightforward questions there is not much difference between the two electronic versions. But as soon as the questions became more complicated, the item non-response rate increased in the simple version compared to the advanced version.

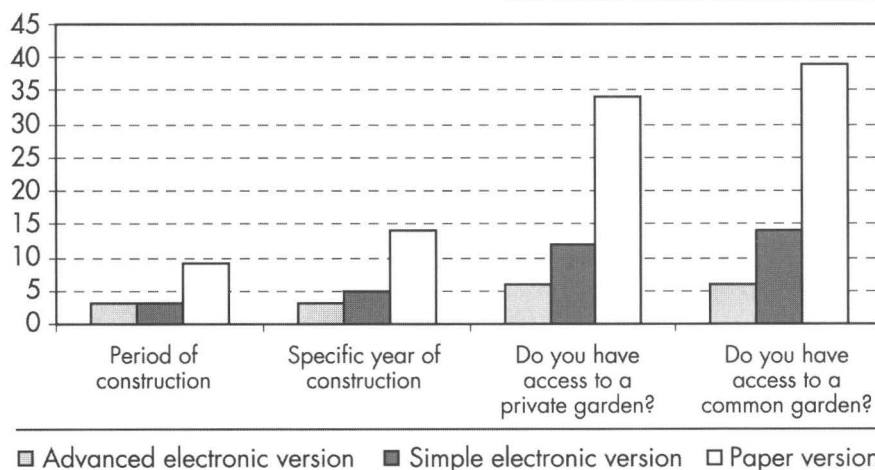
In addition, an interesting finding is that our fear about the simple Web version of the questionnaire producing the lowest quality was, however, not supported by the item non-response figures.

All in all, the general picture seems to be that it is easier to skip questions on paper than on the computer screen. What other quality indicators will show we do not yet know but we are very optimistic about the future of the Internet for censuses.

*This analysis will be followed up in the paper 'Mode Effects in a Mail plus Internet designed Census' to be presented at the International Conference on Improving Surveys in Copenhagen – next August.* ■

## Item non-response %

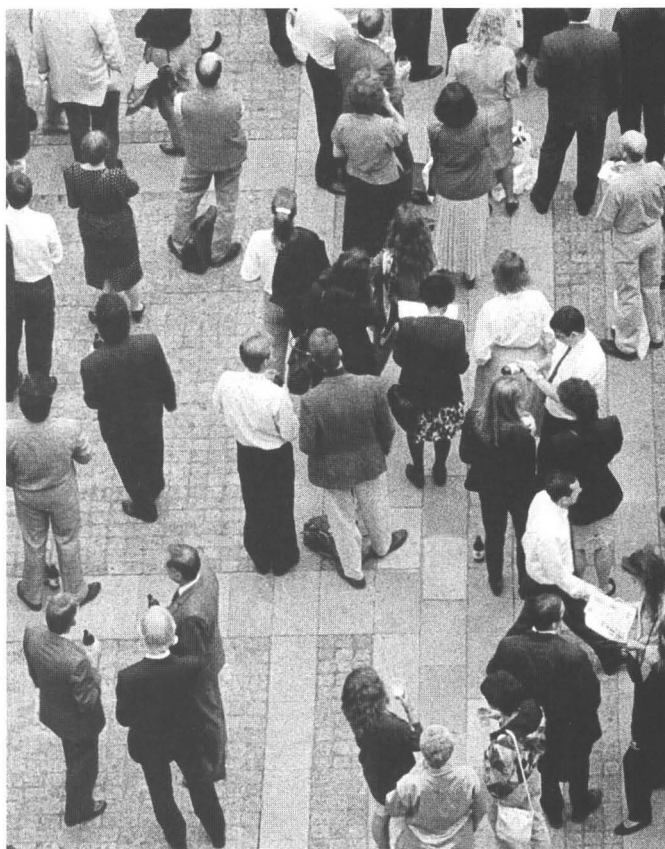
*The item non-response on four questions selected from the paper questionnaire and the advanced and simple web versions of the 2001 Census*



**GÁBOR RÓZSA**, Deputy Head of the Population Census Department at Hungary's Central Statistical Office (HCSO), talks about the 2001 population census in Hungary ...

# Taking a picture of Hungary's society

**In Hungary – as in other European and UN countries – much importance is attached to successfully implementing the full-scale decennial population and housing censuses. Long and thorough preparatory work comprising legislation, field activities, and data processing were necessary to carry out this huge operation that requires enormous personal, technical and material resources.**



**P**reparations by the Central Statistical Office for Hungary's 14<sup>th</sup> population census – carried out in February 2001 – were started some four years beforehand.

To ensure international comparability, UN and EU recommendations for the 2000 census round were closely followed.

## The legal basis

Hungarian legislation requires a specific act to govern the implementation of a population census.

The act adopted in December 1999 defined the census day, the duration and scope of the census, the characteristics of the individuals to be enumerated, as well as the main topics of the census. It provided for a response obligation but exempted a number of specific topics (nationality, mother tongue, religion, and infirmity) from this obligation. The cooperation of the different central and local authorities involved was also ruled by law.

## The topics

The census enumerated the total of Hungary's 10.2 million popu-

lation as well as 4.3 million dwellings, other housing units and institutional households. The topics covered were:

► on natural persons: sex, date of birth, place of residence, marital status, family status, number of live-born children, school attendance, educational attainment, source of livelihood, households, occupation, employer and place of work, commuting, state of health, citizenship, religion, nationality, mother tongue, knowledge of languages, occupancy status in the dwelling, and infirmities.

► on housing units, residential buildings and holiday houses, and institutions for collective accommodation: type, ownership, number of rooms, floor space, communal facilities, level of comfort, kind of heating, year of construction, walls, characteristics of the living environment.

The information collected thus allows to analyse the substantial developments of Hungarian society over the last decade such as changes in family life and cohabitation, modifications in the ownership structure and use of the housing stock, developments of the educational system, trends in the working environment, etc. At the same time, it was a must to be able to compare the results with the past, as well as with the data of the international community, given that a millennium census round was underway all over the world.

## Introducing new tools

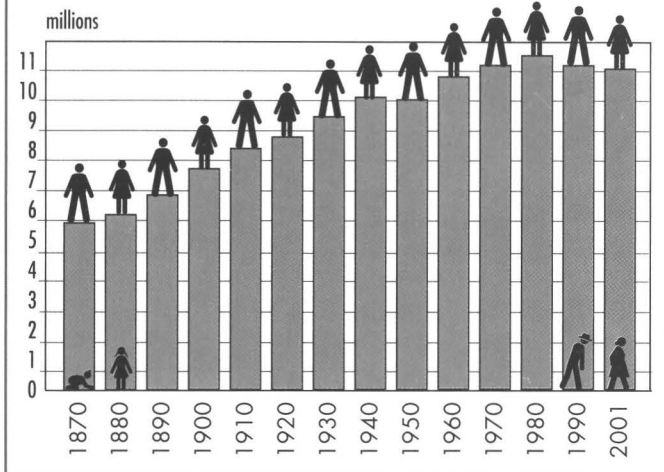
With a view to legal limitations in the use of administrative data sources, the 2001 census was carried out as a traditional survey based on direct interviews with questionnaires and enumerators.

However, we introduced several new features and techniques: in the geographic preparation phase, on the census forms in terms of structure and content, in public relations activities and in the data processing and dissemination technology.

An updated census list of addresses was established by matching and digitised maps were used for localities with over 2000 inhabitants, that will be matched with the relevant aggregated census data.

Besides the traditional and compulsory sets of demographic,

## Evolution of the population, 1870-2001



educational, occupational, family, household and housing topics, the question of legal nationality (citizenship) and religion were reinstated in the questionnaire, as well as a block on disabilities. These topics and those on ethnic nationality and mother tongue are regarded as sensitive characteristics and require careful legal consideration. For this reason, we guaranteed the anonymity of the questionnaire and gave respondents the option of not answering these questions.

Unlike in the past, the census was carried out in anonymity, ie.

without names and exact addresses on the questionnaires in order to take into account legal requirements on ethnic minorities and on personal data protection. After inputting the coded census data into the system, all questionnaires were destroyed.

For the first time, following the coding of the questionnaires, optical reading devices were used for data entry, a system that the HCSO elaborated in cooperation with a private company. The structure of the census questionnaire was adapted to this new data entry system to

ensure that several million multi-sided questionnaires could be scanned.

### The actors

In conformity with the relevant law, the Hungarian Central Statistical Office has been professionally responsible for the census as a whole, including data processing and publication, while the execution of the field work including recruiting and contracting interviewers was the task of local municipalities. The county directorates of the HCSO trained the interviewers, contracted the supervisors directly and carried out the local professional control.

### No 'bargain basement' option

Population censuses are very costly operations from both the workload and financial points of view. The 2001 Hungarian census involved about 50 000 well-trained interviewers and some 10 000 supervisors and nearly 15 million four-sided questionnaires, not to speak of the processing and publication of the data, which will take some time to work through.

Financially speaking, the costs of the central and territorial preparatory works, the collection, processing and dissemination of the data have amounted to around 40 million euro, ie. slightly less than 4 euro per person enumerated.

For the moment being, there is no equivalent alternative to a full-scope census in Hungary. Moreover, no evaluation exists to establish the consequences and costs implied by a lack of census data! So, a census is well worth some investment.

### A wealth of information

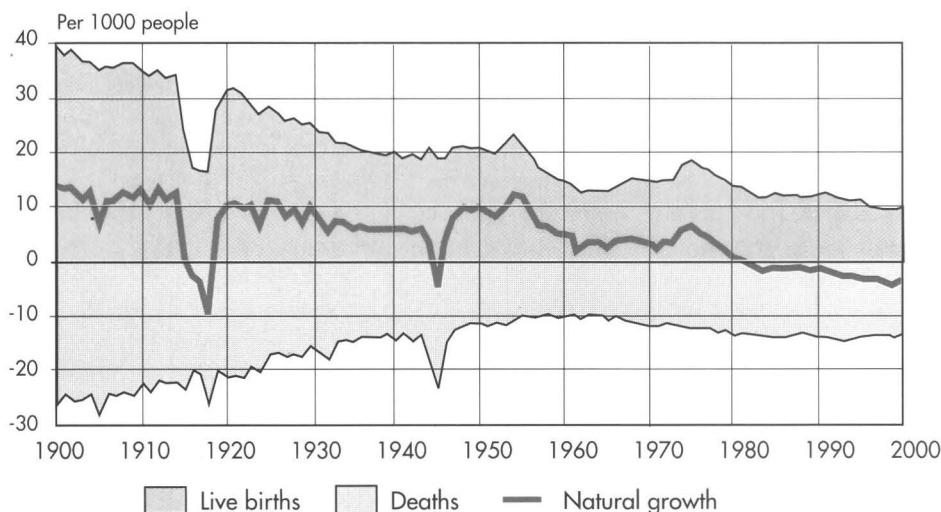
Not only do the processed data represent valuable information, the results of the census will also serve as a source for further statistical and socio-economic studies and will be used as a sample base for future, in-depth surveys and thus provide a unique possibility for a balanced description of Hungarian society.

A first wave of national, regional and locality level preliminary housing and population data were published in mid-2001 in a volume and on CD-ROM. More detailed data of the most important census characteristics were released at the end of 2001.

The geographically detailed dissemination of full-scope data is expected to start in the second half of 2002. In addition to standard publications, geographic and thematic details can be obtained on a cost-recovery basis and under the strict restrictions of the data protection law.

To consult the main data of the 2001 Hungarian population and housing census, visit the homepage of the Hungarian Central Statistical Office: [www.ksh.hu](http://www.ksh.hu) or on the specific census page: [www.nepszamlalas2001.hu](http://www.nepszamlalas2001.hu). ■

## Natural growth or decrease in Hungary, 1900-2000





On the eve of the new millennium, the Nordic statistical institutes formed a working group with a mandate to evaluate how changes in society, technology, the international environment and EU integration would effect statistics and how statistics could 'deliver the goods'. **HELI JESKANEN-SUNDSTRÖM** – Director-General of Statistics Finland and head of the working group – describes the strategy taken by the group.

## Vikings launch a joint plan of attack

In summer 2000, the directors-general of the Nordic countries' national statistical institutes (Iceland, Norway, Sweden, Denmark and Finland) – got together to discuss the future challenges of official statistics.

Because revising and developing statistical systems are processes that can take several years, actions to safeguard service capacity must be taken in good time. This gave rise to the thought that the future and the challenges it will present to official statistics should be analysed more systematically.

With this in mind, a working group was set up to prepare a paper for a joint Nordic strategy on the future challenges. A representative from each NSI was appointed to the working group, with Finland's representative elected to chair it. The group's final report was approved in November 2001 and is a joint contribution of the five NSIs to the debate about the future strategic priorities in statistical organisations.

### New information needs ...

The challenges to the content of statistics brought about by globalisation and rapidly

developing new information and communication technology became paramount during the group's work. Information needs, calling for the production of new statistical data, are not only emerging in economic statistics but also in social statistics. Major challenges arising from international environmental agreements, among other things, were also foreseen in the area of environmental statistics.

The working group further analysed the general operating conditions of NSIs and the expected changes in them with respect to the available resources – human, technological, physical and structural – as well as the challenges connected with legislation, supply of basic data, customers' and users' expectations and efficiency of service systems.

First of all, the Nordic group underlined the increased role of high-quality and independent information in the modern knowledge-based society.

Wide-ranging statistical information is necessary for the proper functioning of modern democracy.

Furthermore, a high-quality statistical infrastructure enhances the ability of markets to operate

efficiently. It also enhances the dynamics of the international financial system. Statistical information gives transparency and accountability to the decisions of authorities and politicians.

### ... in a changing world

In the last few years, the research and development work in the European Statistical System has been rather wide and vital.

At the same time, however, the number of new phenomena that statistics are supposed to describe has increased to such an extent that the whole system of economic and social statistics may well have lost some relevance with respect to the information needs of politics, business and researchers.

High-tech innovations, in particular, are transforming the nature of the economy and the society. Both globalisation and technological development gathered further momentum in the latter half of the 1990s.

What's more, there is a number of other relevant factors, which are often closely interwoven with technology and globalisation. These kinds of derivatives include the emer-

gence of new products and services, quality changes in old products and services, structural changes in the operation of companies, changes in the labour and financial markets, the emergence of the intangible economy, etc. New technology and globalisation are both adding to the inherent complexity of economic and social phenomena.

### New management culture needed

The trends brought about by all the changes in society and in statistical offices call for several responses.

First of all, the systems of statistical description will need to be improved with respect to their contents in order to give a relevant description of a changing society and to meet the new user needs.

Further, the users are changing their demand for how statistics should be served. The change in user needs will also have an effect on the needs for primary data and, accordingly, on the work with data capture. In addition, the working methods, management and organisation in the production of statistics will need to be developed.

Statistics production is a high technology field in which investment in research and development plays a prominent role. The growing investments in research and development could be better integrated into the development of products and production processes.

Furthermore, due to the paucity of resources, prioritisation of development projects and a certain degree of returning 'back to basics' may be necessary in the field of statistics.

What we need is a new management and leadership culture: a better management and strategic planning system, better management of processes, better customer intimacy and better management of people.

Focusing on the future, and the enablers, instead of measuring only consequences of past actions is essential. In the medium term, the goal should be the development of NSIs into top quality organisations that are led according to modern management doctrines.

### Help from new data sources and techniques

As regards data capture, new possibilities will be created by the so-called electronic traces and commercial databases that are being built up. These are enormously rich data sources that, theoretically, could be organised in such a way that NSIs could use them. If such data were to be made available for official statistics, response burden could be cut.

Moreover, it will be crucial that NSIs build bridges between the applicable commercial standards (Bar Codes



or EAN) and the statistical standards.

Another strategic question that needs addressing is whether data should be captured directly from the observation units or indirectly from others. The Nordic tradition – with its heavy use of public administrative data – is an example of indirect data collection.

A great deal of new users is expected on the information

market. Furthermore, the structure of the users will change and customers' data needs will grow increasingly diversified. The demand on the information market is for superficial information consumed by the masses on the one hand, and for in-depth and detailed information needed by the professionals, on the other. This dichotomy presents challenges to the production of official statistics.

### International collaboration essential

The main obstacles to the development of statistics are increasingly originating from the shortcomings in international statistical classifications and standards and from the problems of defining new phenomena.

Due to various new trends in the business environment, statistical definitions, standards and classifications are becoming outdated. It is important to focus on the serviceability of the classifications to ensure that they are better balanced, not necessarily by increasing the number of classes, but by making them more evenly spread.

The Nordic report concludes that, for developing new statistics, it is crucial that users, researchers and data providers cooperate smoothly.

In addition to statistical institutions from different countries working closely together, international statistical organisations should coordinate and direct the work on standards and frameworks.

Sharing experience and good practices among statistical institutions is important in order to avoid unnecessary costs, to avoid "inventing the wheel again" in each country separately. This report is one example of this thinking and, at the same time, one example of the long tradition of cooperation that Nordic statistical institutes enjoy.

*The final report is now available on Statistics Finland's website at:*

**[http://www.stat.fi/tk/sh/nordic\\_strat\\_en.pdf](http://www.stat.fi/tk/sh/nordic_strat_en.pdf)** ■

With a new Commodity Flow Survey, Statistics Sweden is laying down new tracks in transport statistics. It is hoped that this new survey will provide a good point of departure for developing sound intermodal transport statistics.

**KERSTIN FORSSÉN**, senior statistician at Statistics Sweden, on the new survey and what it brings ...

Traditional transport statistics, in contrast, emanate from each transport mode: road, rail, air, and sea transport, and are collected at transport companies. Of course, these statistics are also important for a variety of purposes, but this individual approach has many downsides when an overall picture of commodity flows is needed: goods transported (in tonnes) are counted more than once when different modes are used and added up.

# "All change please" for intermodal transport statistics

**A**n efficient transport system is vital for economic development and competitiveness, and for trade and manufacturing industries to widen their markets and fulfil demand in all parts of a country.

Government authorities and companies alike must be aware of the needs and changes of transportation, since they are responsible for and interested in the efficiency of the transport system. Large sums of money are involved for transport infrastructure, for investment in and maintenance of roads, railways, ports and airports. So, earmarking some cash for statistics to take a clearer snapshot of the economic needs for moving goods within and outside the country would therefore be a wise investment.

Against this background, Statistics Sweden was requested to analyse this question more deeply and to set up a survey that would look at the transport chains of goods transported. At the moment, nodes – points of interchange – are not yet looked into, but will be part of future work. With these data at hand, the transport industry would be able to foster more efficient transport solutions, with infrastructure planning based on



more solid statistical foundations. Such a survey would also provide a better data source for modelling and forecasting important for investment decisions. And last but not least, with some further additions, it might be able to provide intermodal transport statistics – a priority area at EU level.

## Laying new tracks

Following study visits to the US Census Bureau – which undertook a similar survey – and two pilot surveys, Statistics Sweden launched the Commodity Flow Survey (CFS). This sample survey carried out in 2001 covers

all transport modes and will hopefully give answers to users' demands.

The CFS has adopted an entirely new approach concerning transport statistics in that the respondents are the enterprises or local units that receive and dispatch the goods themselves, rather than the transport companies. In this way, the survey is able to follow the complete commodity flow, eg. from the mining and manufacturing industries via wholesale trade up to the final receiver of the goods – independently of the various transport modes.

## Providing better results

The new CFS survey uses local units of enterprises as survey units within manufacturing, wholesale trade and mining and quarrying, and thus all modes will be reported. The population consists of roughly 38 000 local units and the sample of 12 000 for the whole year (a three-stage stratified sample). Other parts of the economy are in the pipeline and will be surveyed (successively) later on, eg. agricultural-related sectors such as forestry, delivery of dairy products, slaughtering, and transport of grains and cereals. The main survey is a mandatory postal survey.

The big plus point of using the delivering and receiving enterprises themselves, rather than transporting enterprises, is that there is no double or triple counting of the goods transported. Goods dispatched within and outside Sweden, as well as goods received from abroad, are covered. The most important variables are weight and value of the goods, the successive modes used during the transport, cargo types, type of goods (related to goods nomenclature NST/R<sup>1</sup>), from where and to which destination (a so-called OD-matrix, origin-destination approach) and where (in locality) the transport crosses the border.



For the survey, non-response averaged around 20%, and figures were considerably smaller for larger and most important local units. Quite a substantial number of the larger local units sent their information as Excel data sets – a further advantage compared to the traditional transport surveys, where the drivers are respondents and have few possibilities to send data files.

Good data sources for evaluating the estimated figures also exist: production of commodities and industrial services statistics, enterprise statistics and foreign trade statistics. Rough comparisons show that the estimated levels of the survey are good. Item non-response exists, but is not that high: non-response is around 5% for weight and about 10% for value.

Early figures show that national transport of goods is mainly by road, while international transport has a considerable degree of sea and air transport, which comes as no surprise considering Sweden's geographical position.

The results of the Commodity Flow Survey will be reported as part of the official statistics of

Sweden in October 2002. This is just one stop on the development line towards intermodal transport statistics for better transport policies and better networks for all. The terminus is some way off yet but we're getting there. ■

1) NST/R: Standard Goods Classification for Transport Statistics, revised version.

Attracting a wider audience to their websites and providing access to statistics in a more targeted manner is an issue for many European statistical offices. INSEE, the French statistical office, has had exactly these ideas in mind with its recent educational outreach initiatives. **ANDRE DE LOS SANTOS**, responsible for web policy and publications at INSEE, gives a run-down.

## It's never too early to start learning statistics

Three years ago, INSEE and the French Ministry of Education started a partnership, the first fruit of which was a CD-ROM aimed at the general public, bringing together key data on the French economy and society: *Tableaux de l'Economie française*. And it wasn't just INSEE doing all the work: the Ministry of Education took an active part in its design to meet the needs of the education sector.

Given these promising foundations, they have taken their collaboration one step further by launching a site called "Educnet/Insee" – accessible via INSEE's website and the Ministry's educational site ([www.educnet.education.fr/insee](http://www.educnet.education.fr/insee)) – to make it easier for schoolchildren and students to access economic and social information.

For several years, INSEE has provided free access to a grow-

ing number of analyses and economic and statistical data via its Internet site, with the aim of making key data on the French economy available to as wide an audience as possible, particularly people involved in one way or another in education.

### Greater access and more fun

However, because the site was not designed for educational purposes, its potential was significantly stifled. This is why we teamed together with the Ministry of Education to reorganise INSEE studies, data and metadata, for use by teachers and pupils, and supplement them with educational user guides, using the expertise of educationalists for a pedagogical approach.

Tailored to the type of questions teachers ask their pupils, and *vice versa*, the site also features a quiz for teachers and pupils to

test their knowledge and understanding about the topic covered.

For the moment, this new feature covers only two topics: investment and foreign trade. Data on prices, employment and enterprises are in the pipeline and expected soon. Concerning investment, which features in the INSEE website under various headings, such as 'annual accounts', 'cyclical indicators' and 'cyclical analysis', Educnet provides a single access point.

A few simple questions are sufficient to access the available information: "How much?" to read the latest figures on investment, "Who?" to find out who is investing, and "What effects?" to discover the impact of investment on growth, etc.

The site not only provides data, but also contains analyses published by INSEE, definitions and methodological details. Educa-

tional establishments and teachers can consult publicly available information, which can be printed, downloaded, adapted and used for non-commercial, educational purposes.

This project is a very tangible example of cooperation between INSEE and the Ministry of Education, which benefits the national education system and contributes to raising the interest of students and improving their knowledge about statistics.

But that's not all. INSEE has further-reaching plans. *Educnet/Insee* is just the first accomplishment of a more general Internet strategy. In order to satisfy the needs of the diverse user categories, different portals will be created to facilitate their access to statistics. Teachers and pupils form part of INSEE's target audience but plans also exist for a portal for enterprises and local organisations. ■

# New hand at the wheel of Swiss Statistics

The Swiss Government recently appointed Dr Adelheid Bürgi-Schmelz as the new president of the Swiss Federal Statistical Office, or 'Swiss Statistics'. She replaces Dr Carlo Malaguerra, who retired at the end of 2001 (see panel). Dr Bürgi-Schmelz – the first woman to become President of the SFSO since its creation in 1860 – took up her new post in Neuchâtel in April 2002.

Adelheid Bürgi-Schmelz gained her professional experience in managerial positions in industry and educational administration. In industry, her activities were focused on telecommunications, engineering, informatics and artificial intelligence at companies such as Telcordia (Livingston, USA), the lift manufacturer Schindler Aufzüge and the telecoms company Ascom (both Swiss companies). Her most recent position at Ascom was as Vice-President, where she led a major project in the company's cooperation division (mergers & acquisitions).

In the first half of the 1990s, Adelheid Bürgi-Schmelz headed the Coordination Centre for International Relations at the University of Berne, from where she led and promoted international cooperation in European educational and research programmes.

## Broad interests

Dr Bürgi-Schmelz's wide-ranging career was made possible by her equally impressive educational achievements. She studied for her first degree at Bonn and Zurich Universities from 1976 to 1981, taking the *Staatsexamen* in Latin, mathematics, philosophy and



New president, Dr Adelheid Bürgi-Schmelz

educational science. She then undertook further studies: operations research and statistics in the United States, in which she obtained her MSc at Rensselaer Polytechnic Institute in Troy, NY; and business administration focusing, in particular, on information systems in Berne, where she was awarded a doctorate (PhD) for her thesis on 'Factors determining success in the development and introduction of knowledge-based systems'.

Adelheid Bürgi-Schmelz is married and has two children, aged 14 and 16. She was born in Bottrop (Germany) in 1957 and has lived in Switzerland for nearly 20 years.

## In demand from the media

Dr Bürgi-Schmelz's new job has been marked by intensive contacts both within Swiss Statistics and with the outside world.

Frequently interviewed by the media, here are some extracts of her interviews:

*What tasks lie ahead of you at Swiss Statistics?*

Consolidation, integration, communication!

When I say "consolidation", I mean that Swiss Statistics has grown considerably, and we now have to digest what we have swallowed, as it were. I say "integration" because, for example, the second round of bilateral negotiations with the EU is due to begin soon. Those negotiations will cover statistics, among other areas. Integration also includes the harmonisation of population registers and closer cross-referencing of statistical data. Lastly, communication, by which I mean both internal and external communication. Those are the key markers which I intend to put down.

*Switzerland cooperates with the EU and with individual EU Member States. How do you see that cooperation moving forward?*

Statistical cooperation with the EU already encompasses a number of different areas, and we value our close contacts with the EU very highly. But that is not enough.

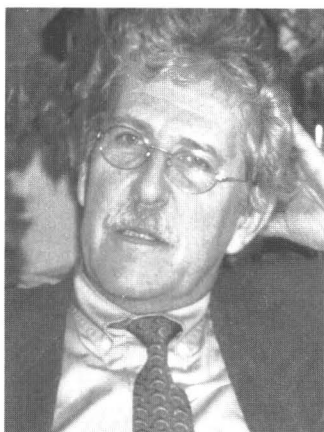
Ongoing globalisation is making it increasingly urgent for Switzerland to possess statistical instruments with which it can gauge its own position. This is why Switzerland entered into bilateral negotiations with the EU, with a view to reaching agreement on statistical cooperation which will ensure "Euro-compatible" production and dissemination of statistical information about Switzerland. Trying to compare non-harmonised statistics is like trying to ring home from America using a European mobile phone!

*Knowledge is power. How much power do you have as Switzerland's 'Chief Statistician'?*

Power to do what? Politics, industry and society at large need reliable information that they can use to determine where they need to act to take the right decisions. The question of what data are collected, and how, is not decided arbitrarily by some authority or other, but within a legal framework. In other words, the power of origination rests with the Swiss people, who wield sovereign power in this country.

And yet, we do have some power of implementation. The "what" of statistics is a legal given. As to "how", the deciding principle is impartiality: Swiss Statistics must retain its neutrality and cultivate its credibility.

*(Quotes from 'Der Bund' newspaper et al)*



**Dr Carlo Malaguerra**

was President of the Swiss Federal Statistical Office from 1987 to 2001. In the course of these years, Swiss Statistics underwent a modernisation process at different levels: at the scientific level, with the introduction of sample survey methods and high tech tools; at the institutional level, with the implementation of a new federal statistical law; at the corporate level, with the qualitative and quantitative growth of resources and with reuniting the staff of different services within a single common house; and finally, at the political level, with the growing social acknowledgement of the professionalism and impartiality of Swiss official statistics.

Since his appointment at the helm of the SFSO, Dr Malaguerra has been strongly committed to international collaboration: within the Conference of European Statisticians (UN-ECE), in the framework of the UN Statistical Commission, the Euro-Mediterranean statistical cooperation and the European and World Population Conferences. He has also been active in the International Statistical Institute (ISI), the International Association for Official Statistics (IAOS) and the TES Institute's board of trustees. ■

# Catching up with Uncle Sam

**Since European Monetary Union (EMU) was launched in 1999, EU/EMU short-term economic statistics have stepped much more onto centre-stage, in particular for conducting monetary policy. However, lacking in timeliness and coverage, these statistics don't attract much applause from the audience – read users. *Sigma's* GLEN CAMPBELL reports on what is being done to remedy the situation.**



In the last issue of *Sigma* (03/2001), we devoted an article to the improvement of infra-annual statistics in the framework of the Action Plan on EMU Statistical Requirements, and presented one element of Eurostat's response: the euro-indicators site (<http://www.europa.eu.int/comm/euroindicators/>).

*Sigma* also communicated suggestions that the Action Plan – even if its impact is substantial – would not be enough to catch up with the US' timeliness and that we could learn a thing or two from our transatlantic counterparts – as well as from ourselves!

Indeed, in parallel to the Action Plan, statisticians from the European Statistical System came together to do exactly that ...

## A task force goes transatlantic

Aware of the US' lead in the area of timely infra-annual statistics and of good practices closer to home in Europe, a 'Task Force on Benchmarking in Infra-annual Statistics' was set up in September 2000 to conduct an intra-EU and EU-US benchmark study on such statistics.

Chaired by Sweden and co-chaired by Eurostat, eight countries (Denmark, Finland, France, Germany, Italy, the Netherlands, Sweden and the UK) teamed up with Eurostat, the European Central Bank and the OECD on the task force.

Armed with a steady supply of notepads and biros, the task force went to see for themselves how the Americans were doing it, with a study tour at various US agencies. In addition, a questionnaire was sent to all EU countries concerning twelve indicators from the EMU Action Plan.



## The American dream comes true?

There may well be something true in the idea of the American dream. At least for short-term economic statistics, that is. For statisticians on this side of the Atlantic, a comparative audit of the respective systems does seem to confirm that there are lessons to be drawn – even if there are some good practices within our own continent that cannot be overlooked.

Let's start with a couple of eye-opening examples. For monthly retail trade data, the US releases a first estimate about 12-13 days after the end of the reference month, while we take anything between 18 and 75 days, with Eurostat publishing aggregated data for the EMU after 60 days. Then there is quarterly GDP that is published after 25-30 days in the US, outpacing Eurostat's 70 days. Other examples are in no short supply.

## How do they do it?

Their key motto seems to be very much "the less fuss, the faster". Because the US favours rapidity over coherence and sub-national details, their statistics – with a few exceptions – are far more up to date than comparable EU/EMU data. Only for the consumer price index, and balance of payments can we outshine our American friends.

Let's look a little closer. In the US, essential short-term statistics must be released within 22 working days after the end of the period – a priority formalised in the official guidelines and which has a major impact on timeliness.

While our timeliness has undoubtedly improved – also thanks to the EMU Action Plan with its 70 day commitment for national accounts – we are still slower and this is compounded by the striking divergences in the speeds of the vari-

ous EU Member States. This is also because of our greater concern about missing data and lower accuracy in first estimates.

## 'Monthly' rules, ok

Then, there is the US' focus on monthly statistics – a prerequisite for timely quarterly statistics. Because data sources are mainly monthly, they make it possible to successively build up aggregates and to analyse data sources and economic developments more frequently. Our situation is very patchy with gaps in some areas because of different periodicities or lack of certain indicators in some Member States. For example, while our production and trade in goods statistics are commendable, it is quite another story for services, labour costs and public finances.

Earlier reference periods also have a significant role to play. Their monthly indicators are often based on a specific day or week in the middle of the month, instead of an average for the month – making it possible to kick off the process a couple of weeks earlier. As for us, the use of a short reference period in the middle of the month is not common practice, the aim being to cover the whole month.

## Estimation over accuracy

The US is also keener on estimation. They use a wide variety of techniques for estimating monthly and quarterly statistics without a full set of data – showing a great deal of pragmatism in the process. For quarterly national accounts, for example, timely first estimates are produced with data often available only for two months. First estimates are often based on small sub-samples. While we in Europe certainly use estimation models, using such techniques for timeliness is not the fashion.

The Americans' focus on rapidity inevitably leads to some inaccuracy for first estimates. But this is no big deal in their view. The statistics are improved as more reliable data come in by increasing coverage, checking basic data, replacing proxies by observed data and, finally, using benchmarking techniques – especially benchmarking short-term results against annual surveys.

The US also works according to a sophisticated release calendar based on successive estimates. But if you think that nobody is interested in first estimates, think again: they often attract more attention than later, more reliable ones.

Another observation is that statisticians are not the only ones involved. A greater number of professional economists make up the team, stretching grey matter to cover particularly economic analysis and a better understanding of user needs. To this can also be added a deeper network bringing together all the movers and shakers – private and public.

## One nation, one system

Finally, behind the scenes of all these elements are the different political and institutional structures in which US statistics prosper. Although it is thematically decentralised with a division of labour between many agencies, it is geographically centralised and coordinated at federal level.

For producing statistics, this means no need for, and time spent in, regional breakdowns, harmonisation and aggregation. Just national figures – and not twelve or fifteen for the euro-zone and the EU respectively – with a homogenous system and one speed. Samples can also be kept small, thus limiting cost and response burden. In Europe we

start from the bottom upwards with national samples. All these aspects certainly provide the US with a more favourable infrastructure.

## Looking in our own backyard

Ok, all that sounds convincing enough, but what about the good work going on within EU Member States? Indeed, we could certainly learn a great deal from our own 'best practices'. Here is just a small handful.

By attaching high priority to the European Central Bank's data needs, Germany managed to cut its timeliness for quarterly national accounts from 70 to 55 days.

The Finnish Labour Force Survey uses Computer Assisted Telephone Interviews (CATI) with a questionnaire programmed to code and edit data automatically to enable earlier publication of labour statistics. Again, for its industrial production index, the Finns use telephone contacts with late respondents to reduce production time from 45 to 30 days.

The UK uses central data validation, parallel processing and scanning to accelerate industrial production statistics. And so on. And individually, creatively and inspiringly on.

All in all, comparison within the EU seems to confirm that those who have set themselves targets for improving timeliness are indeed faster at publishing statistics. Similarly, using monthly inquiries and estimation of missing data tend to improve timeliness of quarterly releases.

## A strategy for progress

Guided by the findings of their visit to US agencies and the intra-EU questionnaire, the task force proposed an ambitious strategy

for progress in September 2001 to the Statistical Programme Committee (SPC). In a nutshell, it helps to join the dots by advocating a specific European approach that accommodates national specificities. While data collection will have to remain in national hands, we will have to explore new ways for compiling and disseminating short-term statistics. In short, we cannot buy the US' centralised production brand without some adaptation.

### Will it bite?

After its adoption by the SPC, the strategy for progress is set to make a difference. The SPC has pledged to speed up the release

of key short-term economic statistics. Within the next five years, they aim to meet European users' requirements, achieving standards comparable to the best in Europe, the USA, and the rest of the world. The specific targets for improving each key short-term statistic have been discussed and are expected to be adopted in September.

In achieving these improvements, account will be taken of the impact on other aspects of quality, production costs, and respondents' compliance costs. Eurostat is to prepare an implementation programme based on these aims, and assess the likely costs. In addition, progress

towards these aims will be monitored annually by the SPC.

Two studies have been started to explore the possibilities of methodological changes and to render national surveys more readily usable for European aggregates. These are a feasibility study on country-stratified sampling for retail trade and a methodological study on sampling for EU-focussed surveys.

Finally, a number of actions and studies will be undertaken in data collection and transmission, indicator compilation, aggregation and dissemination in order to improve timeliness. These

include in-depth studies of good practice, more monthly statistics, creation of a common dissemination platform, benchmarking of infra-annual to annual statistics, earlier reference periods, use of data estimation techniques, more estimation of EU aggregates and jointly conducted EU analysis.

Together with the EMU Action Plan, the strategy for progress is another supporting pillar in the European Statistical System's strategy to match the timeliness of America's short-term statistics, making it less of a dream and more of a reality. Wake up, make dreams come true. ■

The 1998-2002 Community Statistical Programme, which saw the sunset of one millennium and the sunrise of another, ends this year. Eurostat is therefore in the midst of preparing for the new 2003-2007 programme. Eurostat's **JAMES WHITWORTH** – the middle-man between Eurostat and the European Parliament – gives a brief outline of the progress and explains the 'co-decision' procedure, which applies for the first time.

## New legal clout for Community Statistical Programme

Statistical programmes are nothing new. The five-year programmes have been drawn up regularly since 1975 and serve as a guide for all those involved in the European Statistical System in setting out work plans and strategies for the medium term. Today, they are a basic part of EU statistical dialogue, consultation and work.

Since 1997, there has been a statutory requirement for a Community Programme which "defines the approaches, the main fields and the objectives of the actions envisaged for a

period not exceeding five years" (Council Regulation (EC) No. 322/97 on Community Statistics). The Regulation also provides for each multi-annual programme to be supported by annual programmes which give more detailed work objectives for each year.

### Co-decision for the future

The 2003-2007 Statistical Programme will be the sixth of its kind and at the same time the first to be decided upon using

the co-decision procedure, laid down by Article 285 of the Amsterdam Treaty, which stipulates that all major statistical acts have to be adopted through co-decision. Concretely, this means that the Decision setting up the Programme is made jointly by the European Parliament (Parliament) and the Council. And there are between one and three stages ('readings') for the two institutions to come to an agreement on the Decision.

### The story so far

**From July 2000, consultations with NSIs:** Eurostat

consulted with Member States' National Statistical Institutes (NSIs) on a number of occasions to learn about their needs and views and to ensure that the Community Programme was integrated into national statistical programmes. In addition, lessons were drawn from the mid-term evaluation of the 1998-2002 Programme. A final draft proposal was presented and discussed within the Statistical Programme Committee in September 2001, following consultation of the Committee on Monetary, Financial and Balance of Payment Statistics

(CMFB) and the European Advisory Committee on Statistical Information in the Economic and Social Spheres (CEIES).

### **28 November 2001, Commission Proposal:**

The Commission (Eurostat) made a proposal for a Decision of the Parliament and the Council on the 2003-2007 Community Statistical Programme (ref. COM(2001) 683) which was transmitted simultaneously to the other two institutions involved.

### **25 April 2002, First reading:**

The Parliament's Economic and Monetary Affairs Committee is responsible for the proposal – above all, Astrid Lulling as rapporteur. This function involves examining the Statistical Programme in detail and making recommendations to parliamentary colleagues. But Mrs Lulling is no newcomer in this matter – she was also rapporteur for the 1998-2002 programme (see *Sigma*, issue 1/1999).

Two other parliamentary committees were also asked for an opinion on the proposal: the Budgets Committee with Göran Färm (as rapporteur) and the Culture, Youth, Education, Media and Sport Committee with Myrsini Zorba

**James Whitworth** is Adviser to Eurostat's Director-General, Yves Franchet. Based in Brussels, his job is to oversee Eurostat's relations with the European institutions in Brussels, notably the Council and the European Parliament in the co-decision procedure.

drafting the opinion. The Economic and Monetary Affairs Committee approved the report with some amendments on 26 March and transmitted it to the plenary session where it was approved on 25 April.

An opinion was also prepared by the Economic and Social Committee with Susanna Florio as rapporteur. Although this Committee has no formal legislative role, it must be consulted in areas of its responsibility during the early stages of debate.

## **What can happen next?**

**Second reading:** Since the Council in charge, the Economic and Financial Affairs Council, did not approve the Parliament's report without amendment – it proposed its own amendments – a so-called 'Common Position' was established. This means that a second reading will be necessary.

In terms of timing, the co-decision procedure does not specify a time limit for the first reading, but it does for the second. The Parliament has three months following its receipt of the Common Position to either approve the Council's Common Position (in which case the Decision will be immediately adopted), to propose further amendments, or to reject the proposal altogether. In the latter case, the proposal would fall.

Should the Parliament make amendments, they would be submitted to the Council for approval. If the Council approves them all by qualified majority voting, the act is adopted. If there is still no agreement, a third and final reading would then be the next step.

**Third reading or 'Conciliation':** A committee made up of members of the Parliament and Council would within six weeks try to agree on a joint compromise text

which would then be voted upon in both institutions. If the text is approved by both institutions, the proposal is adopted. If either rejects it, the proposal falls.

Co-decision is a lengthy and sometimes complicated process. In the first two and a half years since the Treaty of Amsterdam came into force, nine statistical acts were adopted by co-decision, of which one third were adopted at first reading and two-thirds at second.

In general, those that were approved at second reading were adopted under the simpler variant, where the Parliament approves the Council's Common Position. All three institutions wish to avoid the conciliation phase and this is considered to be particularly inappropriate insofar as a technical domain such as statistics is concerned.

The European Statistical System can anticipate uncorking the bubbly on 1 January 2003. All in all, the process ensures that the different institutions are actively involved in decision-making. It will also hopefully lead to a Statistical Programme which provides a robust framework for medium-term programming. Cheers, in anticipation. ■



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