



Joint database on intangibles for European policymaking

Data from Innodrive, Coinvest
and The Conference Board



Research and
Innovation

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Directorate B — European Research Area
Unit B.5 — Social Sciences and Humanities

Contact: Marianne Paasi

*European Commission
B-1049 Brussels*

Tel. +32 22990972

Fax +32 22979608

E-mail: marianne.paasi@ec.europa.eu

European Commission

Summary of the proceedings

Joint database on intangibles for European policymaking

Data from Innodrive,
Coinvest and
The Conference Board

A policy–science dialogue conference

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Summary prepared by Terry Martin, rapporteur and panel moderator of the conference,
and Marianne Paasi, European Commission

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Preface

The social sciences and humanities programme within the European Union's seventh research funding framework programme (FP7) has supported research on intangibles, contributing to the generation of comparable European and international macro- and micro-level data.

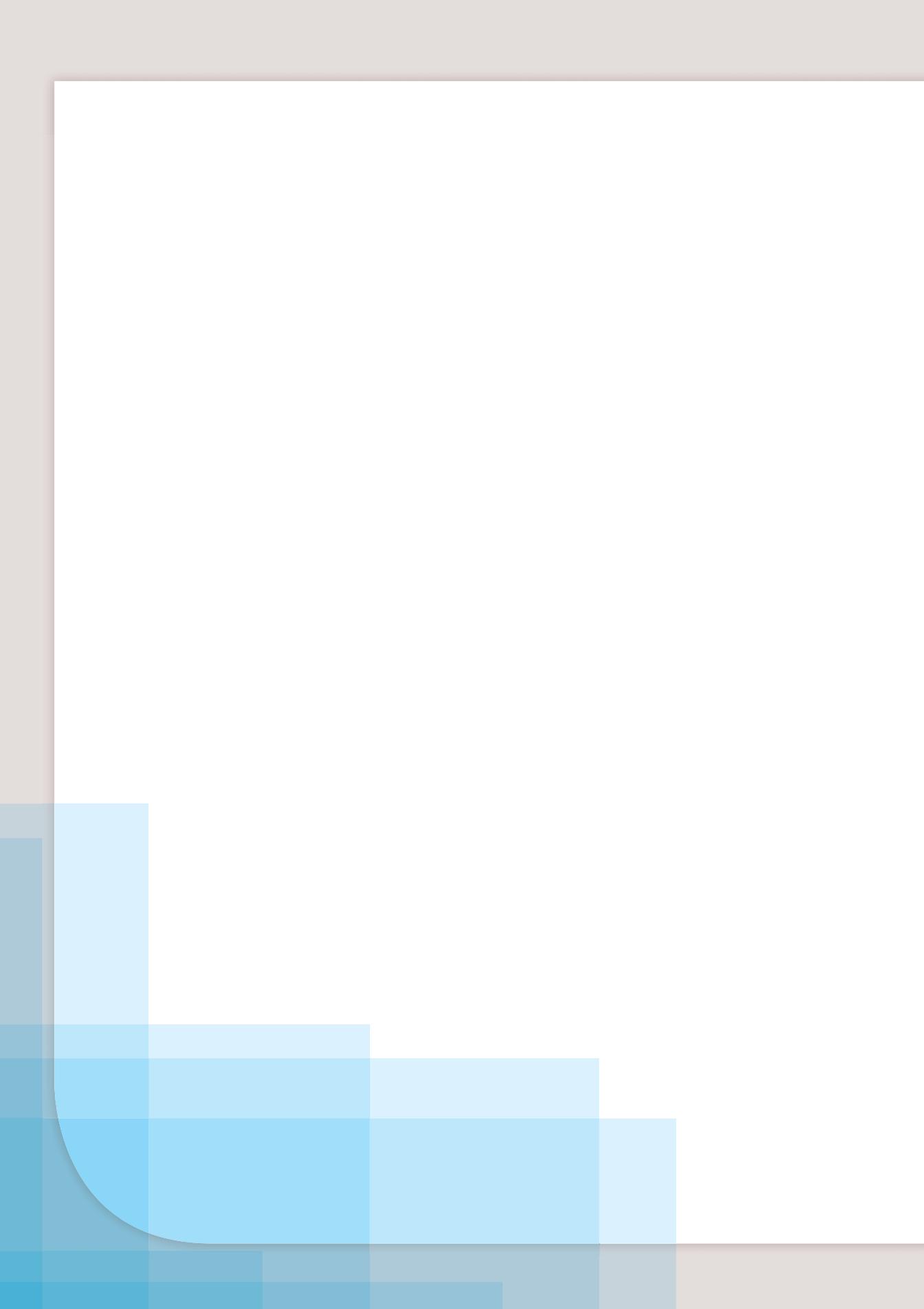
The research teams of the EU-funded projects Innodrive (Intangible capital and innovations: drivers of growth and location in the EU) and Coinvest (compétitivité, l'innovation et l'investissement immatériel en Europe), together with The Conference Board, have set up a harmonised database on macro-level intangibles including all 27 European Union Member States, Norway and the United States: <http://www.INTAN-invest.net>

The freely accessible database, resulting from voluntary cooperation of the three research teams, is a remarkable achievement which will improve research productivity in the field of intangibles.

The harmonised estimates reduce data fragmentation across countries, providing a valuable input for policymaking and contributing to the realisation of the European research area in social sciences.

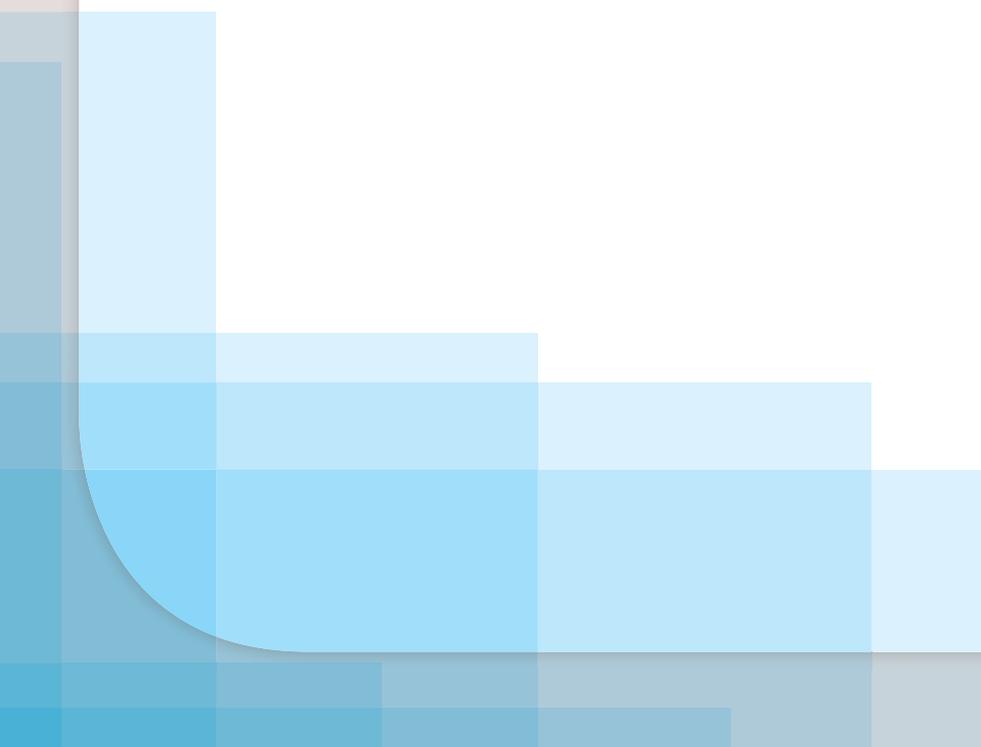
The database was presented at the conference 'The joint database on intangibles for European policymaking — Data from Innodrive, Coinvest and The Conference Board', held in Brussels on 14 December 2011.

This document presents the proceedings of this conference, which provide insights into the discussion with frontier researchers in intangibles and data users from the European Commission, academia and international organisations. Further information on the event is available online: http://ec.europa.eu/research/social-sciences/events-197_en.html



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Opening remarks

Joint database on intangibles: a contribution to European innovation policy and to the European research area

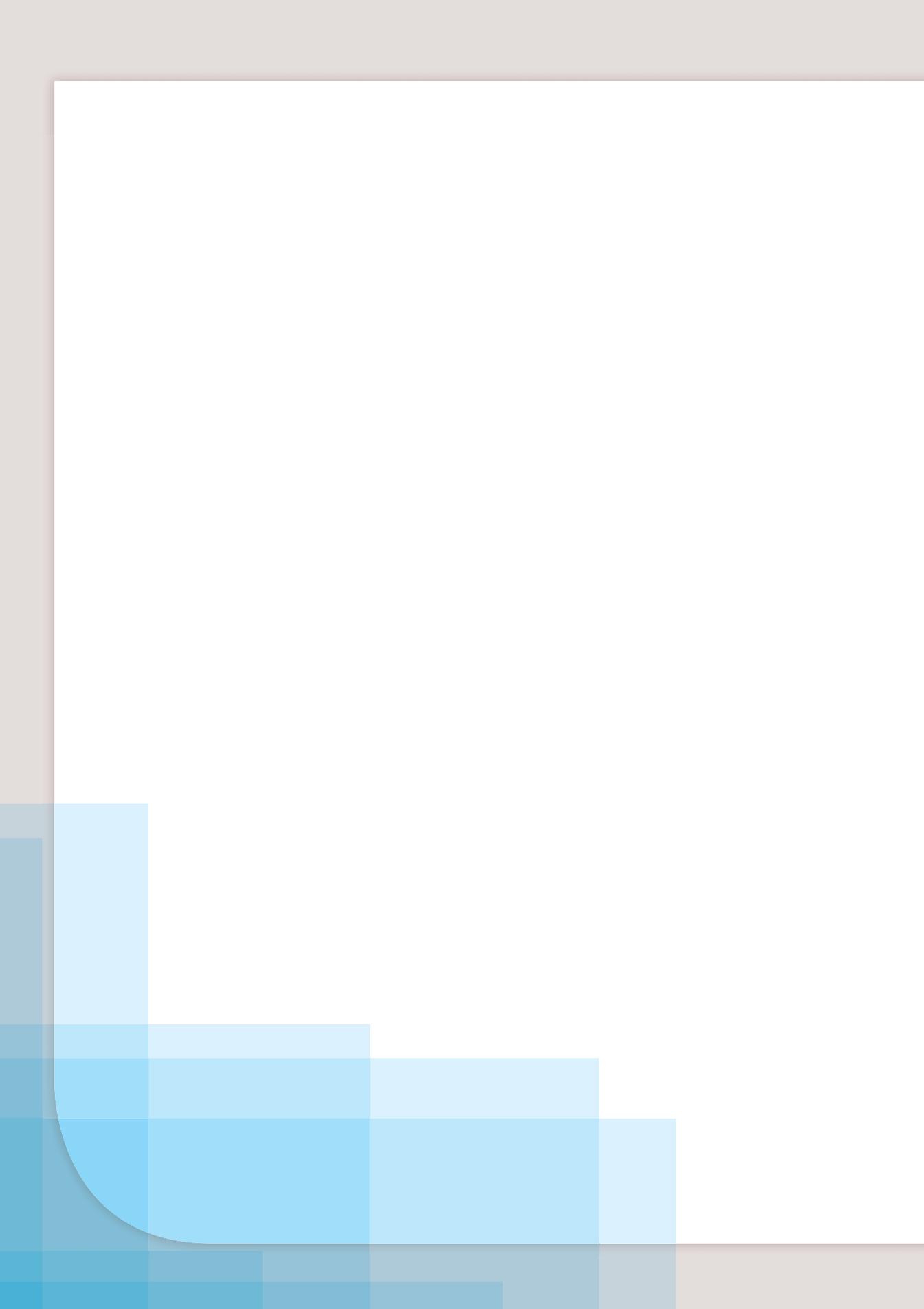
Octavi Quintana Trias, Director, European Research Area Directorate (Directorate B), DG Research and Innovation, European Commission

Octavi Quintana Trias praised the researchers of Coinvest, The Conference Board and Innodrive for their efforts to create a joint database on intangibles, reducing fragmentation in comparative data.

Outlining the researchers' collective achievements, Director Quintana Trias recognised that they had:

- provided the scientific community and policymakers with a common understanding and common standards for interoperational cross-country data on intangibles;
- helped the European Union and its individual Member States gain a better understanding about their innovative capacity by providing measurements that are difficult to obtain;
- aided the transition from research policy to innovation policy;
- created a comparative, open-access database on intangibles which would not have been produced by individual Member States or research groups;
- laid the foundation for a common European understanding of how intangibles contribute to innovation and smart growth, thereby helping to eliminate fragmentation in measurements, data and policymaking.

These achievements, said Director Quintana Trias, represent 'the realisation of the European research area at its best'.



Macro-level intangibles

Methodological and measurement issues about the harmonised estimates across Innodrive, Coinvest and The Conference Board datasets

Authors: Carol Corrado (The Conference Board), Cecilia Jona Lasinio (LUISS Rome), Jonathan Haskel (Imperial College), Massimiliano Iommi (LUISS Rome)

Presented by Carol Corrado (The Conference Board)

Carol Corrado of The Conference Board explained that intangible assets constitute a source of economic growth and are a driver of company value. She noted that the collective research efforts of Coinvest, Innodrive and The Conference Board succeeded in demonstrating that advanced countries have become more intensive in their investment in and use of intangible assets. More importantly from a policy perspective, the research has shown that a good part of economic growth in these countries stems from these investments in knowledge creation.

Carol Corrado pointed out that traditional capital estimates are significantly understated because many of the inputs to innovation are not counted as investment. Rather, according to the CHS 'economic' view of investment (as defined by Corrado, Hulten and Sichel in 2006) 'any use of resources today designed to increase the productive capacity of the firm in the future is investment'.

The following diagram provides a breakdown of intangible assets in accordance with Corrado, Hulten and Sichel's (CHS) economic view.

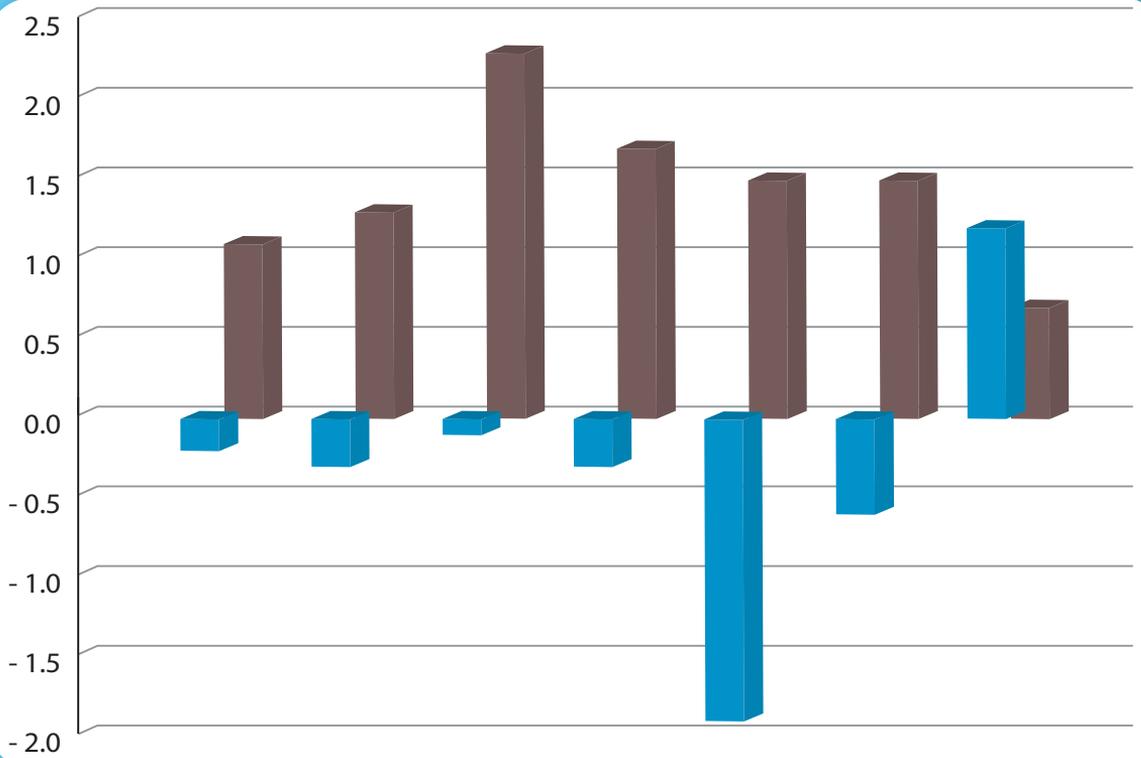
Figure 1

| Broad category | Type of investment | Type of capital |
|--------------------------|--|---|
| Computerised information | <ul style="list-style-type: none"> • Software development • Database development | IPRs/codified knowledge |
| Innovative property | <ul style="list-style-type: none"> • R & D • Mineral exploration • Copyright development (artistic originals) • Design and other product development costs | Forms of IPR: <ul style="list-style-type: none"> • Patent • Licence • Copyright • Design IPR • Trademark |
| Economic competencies | <ul style="list-style-type: none"> • Market research and advertising • Business process investment • Training and skill development | Organisational |

Carol Corrado illustrated the systematic undervaluation of intangible assets by citing the oft-used example of Apple's expenses on design and branding, which traditional capital estimates would not classify as a business investment. She argued that implementing the CHS view of investment would modernise (not to say revolutionise) the portrayal of business activity in national accounting systems. She suggested that policymakers would be in a better position to assess business activity — particularly innovation and productivity — if they applied a different view of investment.

The following charts illustrate how important intangibles have become in European economies. Figure 2 shows that between 1995 and 2006 all parts of Europe (with the exception of the Mediterranean region) saw intangibles accounting for an increasing portion of GDP, while tangibles declined or stagnated.

Figure 2 • Tangible and intangible shares of GDP, change from 1995 to 2006 in the EU

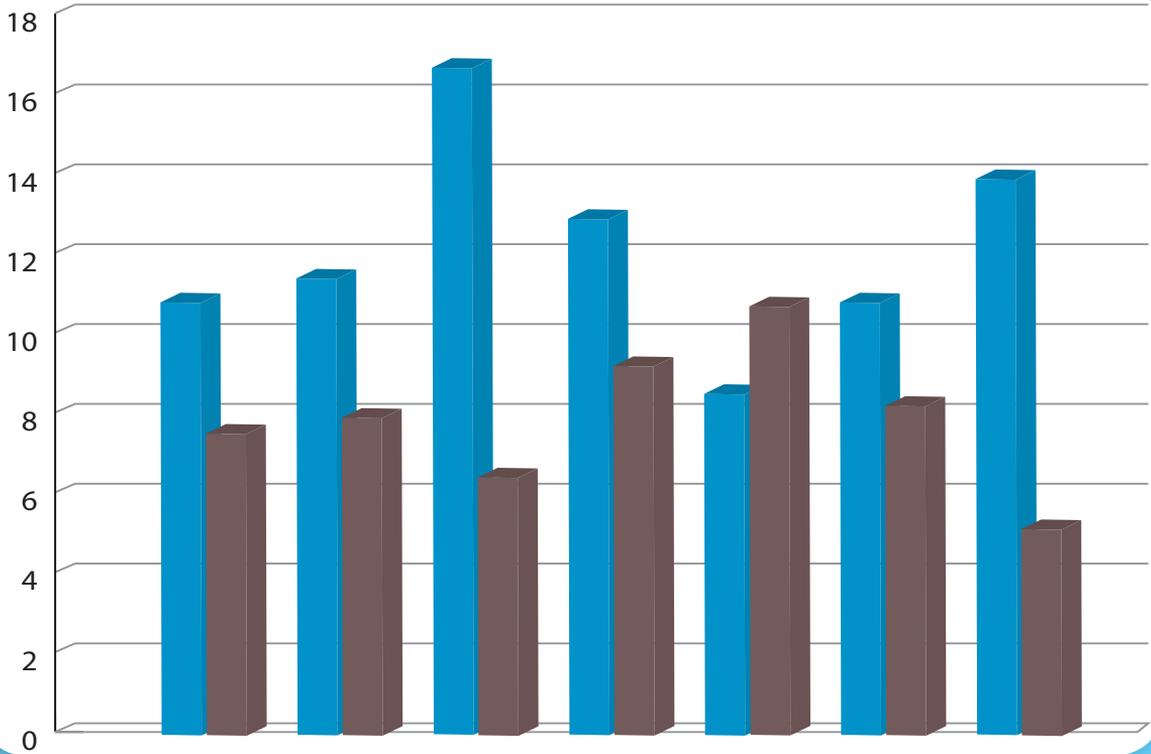


| | European Union (25 countries) | European Union (15 countries) | New Member States (2004) | Scandinavia (DK, FI, SE) | Anglo-Saxon countries (IE, UK) | Continent (BE, DE, FR, LU, NL, AT) | Mediterranean (EL, ES, IT, PT) |
|--------------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------|--------------------------------|
| ■ Tangible | -0.2 | -0.3 | -0.1 | -0.3 | -1.9 | -0.6 | 1.2 |
| ■ Intangible | 1.1 | 1.3 | 2.3 | 1.7 | 1.5 | 1.5 | 0.7 |

* The calculations in Figure 2 are based on the estimates of December 2011. Updated estimates can be found on <http://www.intan-invest.net>

As of 2008 (the latest year for which data is available and analysed), intangibles in most European regions still made up a smaller portion of overall GDP than tangibles (Figure 3). Featuring proportionally large financial services sectors, the Anglo-Saxon countries (the UK and Ireland) proved the only exception.

Figure 3 • Tangible and intangible shares of GDP in 2008 for 25 countries



| | European Union (25 countries) | European Union (15 countries) | New Member States (2004) | Scandinavia (DK, FI, SE) | Anglo-Saxon countries (IE, UK) | Continent (BE, DE, FR, LU, NL, AT) | Mediterranean (EL, ES, IT, PT) |
|--------------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------|--------------------------------|
| ■ Tangible | 10.9 | 11.5 | 16.8 | 13.0 | 8.6 | 10.9 | 14.0 |
| ■ Intangible | 7.6 | 8.0 | 6.5 | 9.3 | 10.8 | 8.3 | 5.2 |

* The calculations in Figure 3 are based on the estimates of December 2011. Updated estimates can be found on <http://www.intan-invest.net>

The accurate measuring of intangible assets is, however, difficult. One especially problematic issue is how to identify price deflators and calculate asset depreciation — a point that came up repeatedly in later presentations and discussions. She also conceded that more work is needed in order to properly understand exactly how intangibles are linked to innovation and productivity. Yet, recognising the importance of intangibles as a source of competitive advantage at the macroeconomic level is increasing.

On the crucial topic of innovation — important in the context of the Europe 2020 strategy and the Innovation Union Initiative — Carol Corrado did offer a suggestion on how to recognise commitment to innovation at firm level. Citing types of innovation outlined in the OECD's *Oslo manual* (akin to the CHS 'economic' view, she noted), the speaker described evidence of commitment to innovation as 'an allocation of resources to developing and implementing' the following:

1. new products;
2. new production or distribution processes;
3. new marketing methods;
4. new methods for organising and executing business practices.

Carol Corrado concluded by noting that one of the next steps in developing the joint intangibles database is to extend the estimates to 2010, providing a deeper analysis of intangible investment during the financial crisis period.

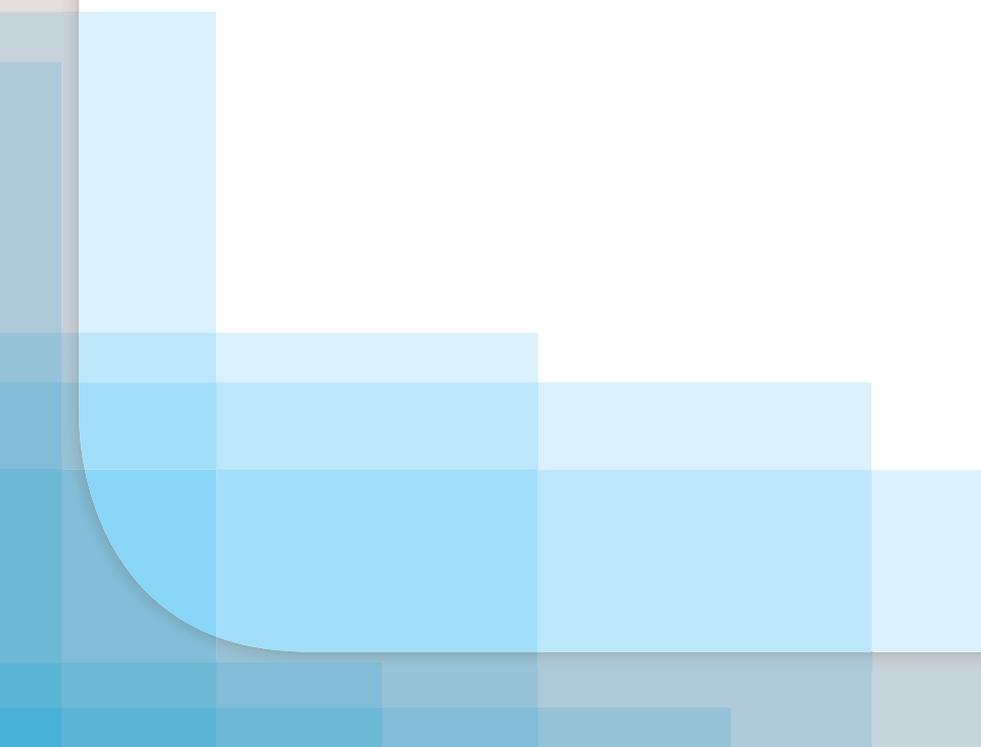
Comments by users: Alessandra Colecchia (OECD)

Alessandra Colecchia of the OECD pointed out that there had originally been significant differences between Coinvest and Innodrive estimates of total investment in intangibles as well as investment by asset types. However, she said that a large part of the gap had been bridged in the joint database.

This had been accomplished by:

- using the Innodrive estimates as a basis;
- extending sectoral coverage to agriculture;
- extending the estimates to 2008;
- including apprenticeships in the measure of training;
- decreasing the rate of depreciation of R & D from 20 % to 15 %.

Yet potential sources of additional disparities remain, Alessandra Colecchia observed. One category of assets that is particularly difficult to measure, she said, is economic competencies (e.g. brand equity, firm-specific human capital, network, organisational capital, advertising and market research). She noted a need for consensus on measuring investment in this asset group.



Using the new intangibles datasets for economic analysis

Role of intangibles for economic performance and policy implications

Authors: Carol Corrado (The Conference Board), Cecilia Jona Lasinio (LUISS, Rome), Jonathan Haskel (Imperial College)

Presented by Cecilia Jona Lasinio (Italian National Institute of Statistics (ISTAT) and LUISS Lab of European Economics (LLEE))

The second part of the conference began with a thoughtful exploration of the mechanisms by which intangible assets affect productivity growth. Cecilia Jona Lasinio reminded us that technology is generally recognised as the main force of growth and that adoption of new technologies (ICT) has been considered as a fundamental driver of economic growth during the past decade. She noted, however, that research has suggested that the complete benefits of new technologies are obtained only when they are associated with new organisational change, intangible assets and appropriate types of skilled workers. Several studies demonstrate that productivity growth is higher once the complementary role of intangibles is accounted for.

Cecilia Jona Lasinio explained how she (in collaboration with fellow researchers Carol Corrado and Jonathan Haskel) set out to test the hypothesis that 'those countries where the accumulation of intangible capital is relatively higher experience faster productivity growth in more ICT-intensive industries as compared to less ICT-intensive industries'.

The empirical results of their research indicate the following.

- The estimated output elasticity of intangible capital exceeds its factor share, consistent with spillovers to intangibles.
- Relative to the country and sector averages, the productivity growth differential between low and high ICT-intensive industries is higher in more than in less intangible-intensive economies.
- Organisational capital and new financial products have relatively stronger effects on productivity growth differentials as compared to other intangible assets.
- These effects are mostly apparent in the UK where the accumulation of both assets is relatively higher.

Policy implications

These findings have implications for the policymaking community. Specifically, Cecilia Jona Lasinio proposed that policymakers consider extending tax advantages to cover all intangibles, not just research and development. And she said that human capital accumulation should be encouraged.

Finally, Cecilia Jona Lasinio raised the issue of whether Europe is failing to exploit the growth potential of intangible capital because of a relatively low level of technological development.

Comments by users

Lucilla Sioli, Head of the Economic and Statistical Analysis Unit at the European Commission's Directorate-General for Communications Networks, Content and Technology, explained how the European Commission uses the new intangible datasets. However, she first described how the Commission has already been using the results of a related sixth framework programme Social Sciences and Humanities (FP6 SSH) project, EU KLEMS, in the annual growth strategy (AGS), which outlines the Commission's economic strategy for the coming 12 months. As ICT places a very important role in the strategy, her office has been extensively using EU KLEMS when preparing ICT policy-related materials for the President of the European Commission.

Lucilla Sioli explained that the work being done on intangibles was important because it provided concrete evidence for what many policymakers had already suspected for some time. In particular, there is now strong evidence on how organisational capital interacts with ICT. The Commission was already of the opinion that companies needed to invest in organisational innovation and organisational capital in order to exploit the benefits of ICT. The papers presented at the conference, she said, provided robust evidence for this.

Another significant contribution of the joint intangibles database, according to Lucilla Sioli, is that it shows how important it is to integrate methodologies. In this context, she referred specifically to EU KLEMS, Innodrive and Coinvest. Politically, she said, there is considerable appreciation for the fact that the work being done on intangibles goes beyond investment in R & D and includes skills, human capital

and organisational capital. The work supports a welcome shift away from having to demonstrate the importance of investing in R & D and ICT (which is well known) and supports movement toward innovation policy, she remarked. She described the database as being 'up to speed' in terms of the policies that the Commission wants to implement.

Lucilla Sioli went on to explain how the digital agenda for Europe could help Europe stimulate even more investment in intangibles. And she stressed the need for timely updates of data, saying this was very important for policymaking. She suggested that Eurostat might be able to contribute to this effort.

Dalia Ciriaci (Joint Research Centre (JRC), European Commission) appreciated the fact that the FP7 SSH projects Coinvest and Innodrive together with The Conference Board have created public goods, i.e. excellent databases on intangible investments sharing common definitions and using a harmonised approach based on a growth accounting framework (Corrado et al., 2005). They have confirmed and provided empirical evidence at macro level about the economic importance of intangibles from a growth accounting point of view, an output that is really relevant to the JRC.

As far as the paper by Corrado, Haskel and Jona Lasinio is concerned, its positive contribution might be improved still further. Further research should take place on the following aspects. Firstly, the authors should address the endogeneity issue of intangible investments (as is also stated by Marcel Timmer). Secondly, she suggested incorporating spillovers within the production function with a measure of the stock of intangible assets that sector i indirectly uses (via spillovers) from other industries k (following Griliches, 1979) using weights, if data allows it. Thirdly, a time lag between an investment and its effect on productivity might be checked for. Finally, the authors should be careful before deriving firm-level policy conclusions, as they work on aggregate data and not on firm-level data, not even sectoral data (use of ICT to introduce sectoral variance in the dataset).

Marcel Timmer (University of Groningen) described what he sees as the main advantages of the projects behind the joint database. Along with producing new data, he pointed out, the projects have carried out new analyses. They have shown not only how intangibles' estimates can be used for growth accounting, but — significantly — they have gone beyond that. He said that if we want to understand the effects of intangibles on economic growth, perhaps a new approach is needed to replace the traditional growth accounting.

Commenting on the presentations made at the conference, he remarked that he liked how they are trying to figure out the effects of different kinds of capital. He had a hunch, he said, that not all intangibles are the same. He suggested that intangibles like branding or spending on advertising will probably have different spillover effects than spending on R & D. He also noted the difficulty of measuring the depreciation rates of intangibles which might be endogenous as they also depend on what other firms in the industry are doing (Howitt, 1998) and identified a need to measure more effectively the output of new products that result from investment in intangibles, and especially how to measure their prices.

Marcel Timmer then focused attention on the issue of macro versus micro effects, which he referred to as 'the aggregation issue'. He noted that the macro effects of investments are not simply the sum of micro effects. The aggregate (macroeconomic) effects of intangible investments might be less than all the firm-level effects, he asserted, noting that results are affected by investment in intangibles by other firms in the same industry and perhaps in other countries.

He also mentioned that evidence is emerging to suggest that the market-stealing effects of intangibles may be more problematic than those of tangible investments. The possibility of negative spillover effects remains to be properly explored, he said.

An important issue for further research is that presently the intangibles are conceptualised and measured for a closed economy. This might be adequate for the USA, but what about countries like Estonia for example? He concluded by suggesting that it might be useful for European researchers to use the new estimates on intangibles to help sort out the role that intangibles play in value chains connected with international trade.

Methodology for collecting firm-level intangibles data

Application to regional intangible capital accumulation and evidence for metropolitan externalities (in Germany, Finland and the UK)

Authors: Hannu Piekkola (University of Vaasa), Bernd Goerzig (DIW), Rebecca Riley (NIESR)

Presented by Hannu Piekkola (University of Vaasa)

Hannu Piekkola opened the methodology session with a detailed summary of efforts to capture data at firm level in the Innodrive project ⁽¹⁾. The measurement of intangible capital at firm level has been a difficult task in the literature. The Innodrive research takes a bottom-up approach in which firms, rather than regions or nations, are the main actors. Working from a large, linked employer–employee dataset, firm- and regional-level strategies related to internal knowledge and R & D & I capital (research and development and information and communication technologies) were analysed to see how they explain economic performance in six countries: Finland, Norway, the UK, Germany, Slovenia and the Czech Republic. While a detailed account of the methodological concerns would exceed the scope of this report, the empirical results of the firm-level data analysis should be noted.

— **Intangibles have increased and improved productivity over time:**

- UK: intangible capital doubled between 1970 and 2004;
- USA: accounts for 18 % of multi-factor productivity growth, 1995–2004 having seen a faster growth than in Europe.

1
The project Innodrive has also generated micro-level data for eight countries. You can access Innodrive's company intangibles database online: <http://www.innodrive.org>

- Recent development in the 2000s:
 - intangibles have mostly been a constant share of GDP across countries.
- Intangibles versus fixed investment:
 - intangibles are less useful as collateral;
 - recessions are harmful for organisational capital, one of the key drivers of growth and accounts.
- Intangibles promote productivity growth:
 - Panel regressions yield robust evidence that intangible capital also improves the profitability of firms. The evidence from Germany, Finland and the UK also indicates that firm-level strategies employed are also influenced by significant localisation effects that accrue when firms are located in regions that are rich in either organisational or R & D & I capital.

Hannu Piekkola also noted that while new intangible investment is generally not included in national accounts, it should be. He observed that countries with traditionally high rates of R & D (e.g. Sweden, Finland, Germany) rank above average in terms of their investment in intangibles. Management and marketing companies also invest in the production of intangible capital; this investment is not (yet) included in standard surveys on innovative investment.

Comments by users

Tony Clayton (UK Intellectual Property Office (IPO)) raised the issue that it is important to count the problem-solving occupations within firms, which are more than R & D personnel or engineers. In particular, the role of sales engineers is critical for the economic performance of firms with intangible assets. One should also take into account that ICT is used in very different ways across the sectors, i.e. the ICT matrix differs.

Georg Licht (Zentrum für Europäische Wirtschaftsforschung (ZEW)) argued that the measurement of R & D competences/skills within firms is underestimated. It is important to understand that there is an internal labour market and that firms invest in vocational training and education. This creates lots of experience within the firms, but is not measured and visible in the statistics.

D'Artis Kancs (JRC, European Commission) appreciated the important contribution of the Innodrive project towards better understanding the role of intangible capital in productivity growth, as the database of Innodrive combines unique data on intangibles, which is of great interest both for policymakers and researchers. In particular, intangibles play an important role in achieving the objectives of European policy. The estimates on the three types of intangibles allow a better assessment of the relative contribution of different types of intangible capital in aggregated productivity growth.

The proposed methodology focuses on three types of intangible capital: (i) information and communications technology (ICT); (ii) research and development (R & D); and (iii) organisational capital (OC). In the literature, however, human capital in firms has also been found to play an important role. In future it would be important to also look at human capital in firms. Innodrive estimated own production of intangible capital. The next step would be to assess the value of purchased intangible capital, which would allow an assessment of the total intangible capital of firms.

Intangibles and measurement

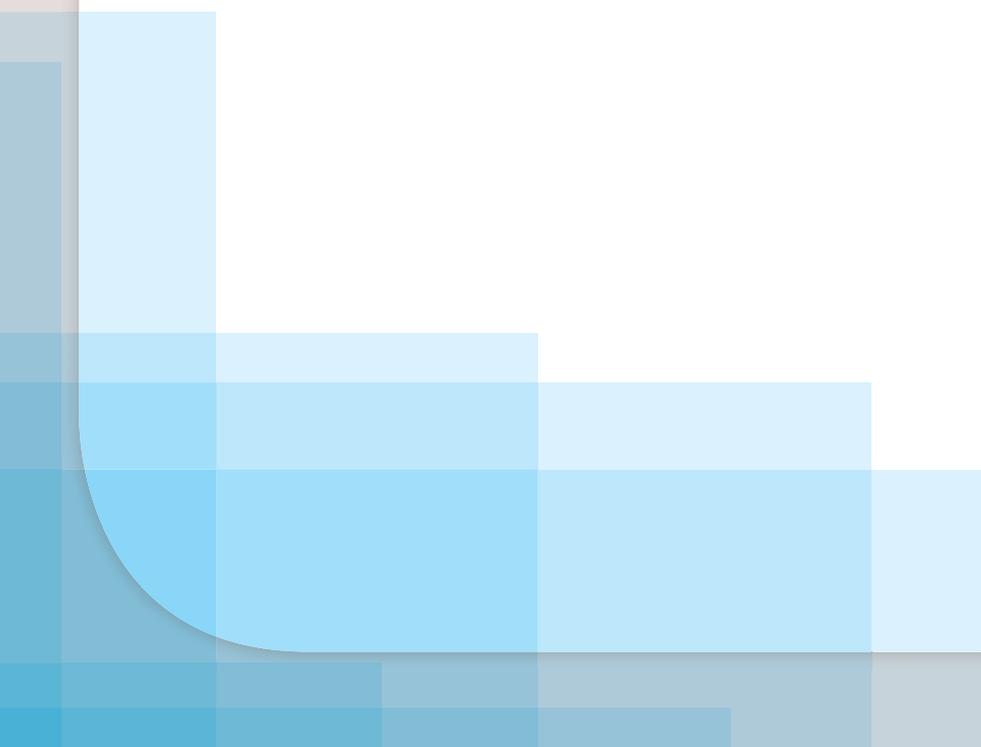
Author and presentation by Tony Clayton, UK IPO

Tony Clayton of the UK's Intellectual Property Office made a presentation on intangibles and measurement. In contrast to many other countries, more is known about intangibles than tangibles in the UK — partly due to the fact that the UK has not done a tangible asset survey for about 25 years. Taking this into account, we should not apply much higher standards to intangible assets than to tangible. So the fact that intangible assets have very different lives (on which we have good recent evidence) should not be used as an excuse to undermine their use in analysis. Our data on tangible assets is much older and the UK, as elsewhere, has continued to use very old assumptions.

In particular, intellectual property rights are often not included in GDP. What is missing is, for example, unpatented R & D, workplace skills and business organisation. Furthermore, even if intellectual property rights were included in GDP, their measurement might not reflect their true economic value.

He argued that it is important not to assume that just because something is in the national accounts that it is done the same way in every country. He mentioned the example of how software is regarded in the national accounts of Germany, suggesting that software is assessed in a different way there than it is, for example, in the UK. About half the countries in Europe do not use the 'supply side' method recommended for software capitalisation by the OECD.

Therefore, he concluded, statistical institutes — including Eurostat — have a big job to do. When a German participant at the conference mentioned that Germany was planning to conduct a survey on software, Tony Clayton maintained that a survey would not be sufficient.



Panel on future research agenda on intangibles

Open issues, opportunities, how to proceed

Bart van Ark, The Conference Board

Baudouin Regout, Bureau of European Policy Advisers, European Commission

Alessandra Colecchia, OECD

Marcel Timmer, Universität Groningen

Tony Clayton, UK Intellectual Property Office

Georg Licht, ZEW (Zentrum für Europäische Wirtschaftsforschung)

Sandro Montresor, Joint Research Centre (JRC), European Commission

Jean Bergevin, DG Internal Market and Services, European Commission

Peter Smith, DG Internal Market and Services, European Commission

Marianne Paasi, DG Research and Innovation, European Commission

Terry Martin (Moderator), Science–Policy Interface Agency (SPIA)

The conference concluded with a lively and wide-ranging panel discussion involving stakeholders from the spheres of research and policymaking.

The moderator began the discussion by asking the panel to share their views on the main obstacles to gaining greater recognition of the importance of intangibles. Bart van Ark identified ‘financial accounting’ — particularly at firm level — as the main obstacle. Sharing anecdotes from his experience in presenting research findings on intangibles to corporate executives, he said financial accountants ‘hate this stuff’; for chief financial officers (CFOs), trying to get a grip on intangibles is ‘a nightmare’. He related an anecdote from his recent encounter with a bank which told him ‘there is no way we will ever want to have this on the balance sheet’. While he acknowledged that he was exaggerating somewhat for the sake of debate, Bart van Ark said it is true that ‘most accountants don’t want to hear about’ intangibles viewed in the form reflected in the joint database.

Agreeing with Bart van Ark's assessment, Tony Clayton noted that he and Jonathan Haskel (also present) had virtually been 'thrown out' when they presented their findings on intangibles to the Confederation of British Industry some two years ago. However, he said 'they are now coming back and saying perhaps there is something there' even if they are not quite sure what. He noted that some French and German management accountants and financial analysts are interested in the findings. He suggested that getting them engaged is key.

Responding to the question of whether the data on intangibles are sufficiently robust to overcome obstacles to acceptance, Alessandra Colecchia noted that it can be difficult to agree on a 'common language'. She shared an anecdote from a recent conference where economists, accountants and policymakers had difficulty understanding each other because of a lack of a common language. She suggested that this is crucial as the lack of acceptance is having an impact on the data quality itself.

Marcel Timmer said researchers can be very good at measuring the input costs of intangibles, but if you want to make it to innovation, policymakers are interested in the outcomes. He conceded that there is a 'weak link' in this area. He noted that until researchers provide the link between outputs and intangible investments, policymakers will continue to 'have a hard time' dealing effectively with this issue.

Tony Clayton, however, asserted that 'we don't do that with any other form of asset'. He noted that in international accounting and national accounting 'we value assets at their input costs'. A discussant then pointed out that this constitutes a problem, especially with respect to own-account investment, because it means there is an 'undervaluation of what is spent'.

The moderator then asked the panel to reflect on how much progress had been made with respect to intangibles in overcoming the **four inherent measurement difficulties** classified by Peter Howitt in 1996.

1. *The knowledge-input problem*

This concerns the measurement of the resources devoted to the creation of knowledge, which often cannot be distinguished unambiguously from other inputs, such as labour and capital.

2. *The knowledge-investment problem*

This refers to the output of the process of knowledge creation, which typically is not measured at all because knowledge does not for the most part produce a commodity or service.

3. *The quality-improvement problem*

This relates to the need to pick up on improvements in goods and services that result from knowledge creation. It is an inherent part of the criticism of official statistical measures of prices and real output growth and has induced major statistical programmes to improve their measurement methods.

4. *The obsolescence problem*

This refers to the need, with any type of capital, to find a measure of depreciation, which is very difficult for intangible capital measures.

Bart van Ark responded by noting that good progress had been made on the knowledge-investment problem, adding that he and his fellow researchers have 'got it pretty well harmonised'. As for the obsolescence problem, he said 'we are still trying, but it remains a data issue'. On the knowledge-input problem, he referred to Marcel Timmer's previous remarks on the subject (above), and with regard to quality improvement he suggested that 'we are not really off yet'.

Carol Corrado added that there is emerging work on estimating price deflators for R & D. She said that a lot of work still needs to be done to see whether the quality changes in the final goods and services that are the product of innovation get measured appropriately. 'That's the only way we are going to know what's really going on,' she suggested.

Jean Bergevin noted there is a real credibility problem for policymakers who are trying to make decisions on intellectual property issues, for example. He indicated that the researchers working on the joint database are close to having more usable information than many policymakers have now. He noted that much of the data being used for policymaking in this area is limited to patents (which at least can be counted) while the usable literature on copyrights, trademarks and design has been 'zero'. He confirmed heightened interest in intangibles among financial analysts, particularly when a merger is being considered or there is a bankruptcy. He said that there is a real demand for reliable data on intangibles from the policymaking community he represents.

On the question of what has to happen in order to get companies to report intangibles data consistently, Tony Clayton commented that the one initiative he is aware of is between the French and German finance ministries and Heidelberg and Paris universities.

Carol Corrado said a lawyer associated with international accounting standards bodies had suggested to her that these bodies are aware that there is 'a big hole' with respect to intangibles accounting, but that the bodies simply have other priorities and move rather slowly. She suggested that much more needs to be done on the communications side to raise awareness amongst the business community with respect to intangibles accounting.

Carol Corrado indicated that there has been a general reversal in thinking about intangibles (beyond R & D) among economic statisticians during the past 2½ years. She said they have indicated to her that they 'will do this' if they are given some good data and they plan to work on it with whatever resources they have. She noted, however, that experience suggests that even if a body like the System of National Accounts (SNA) takes something on board, it can take 10 years before something actually happens.

Bart van Ark suggested that researchers need to do more to convince companies that there are real strategic advantages to measuring intangibles, and once that awareness is there at the corporate level, financial accountants will follow.

Jean Bergevin noted that SMEs are generally more easily convinced than larger companies that 'their know-how is the core of their business', a point confirmed by Carol Corrado. He also pointed out the importance of getting banks on board for the sake of these companies as their know-how is important collateral.

Jonathan Haskel then shared an anecdote from Australia and Alessandra Colecchia shared one from Brazil on how SMEs and other companies are gaining recognition for their intangible assets through bottom-up as well as top-down approaches. Ms Colecchia said policymakers, however, cannot be expected to make decisions about intangibles until researchers provide better insights into issues such as spillover effects.

Drawing on his experience as a banker and business consultant, Baudouin Regout noted that even if companies are willing to recognise the value of intangibles, they may be reluctant to report more about them because of possible tax liabilities and the fear that they may be disclosing sensitive data. Nonetheless, companies are already providing quite a bit of sector-related data on intangibles, he said, citing spending on R & D in the pharmaceutical industry and advertising in the consumer goods industry. From a policymaking perspective, he added that having consistent input variable reporting on an annual basis at sector level would provide some very valuable clues. He suggested that the effort already made by the researchers is very impressive and one should try to capitalise on it more and faster.

Georg Licht suggested that research should prioritise the intangibles which drive growth. Getting clear accounting on organisational capital in the firm, he said, is simply not realistic at this time and this should not be a priority. If the focus is on the doable, i.e. what can be measured with strict and uniform principles, then businesses might be more likely to cooperate.

Tony Clayton said the policy priority for intangibles should be to get capital markets functioning more efficiently, to improve investment, which could help Europe cope with its current crisis. He also suggested that the priority should be to quantify the intangibles that can be quantified (including R & D, software, perhaps even design) and simply describe the things that cannot be quantified such as organisational capital.

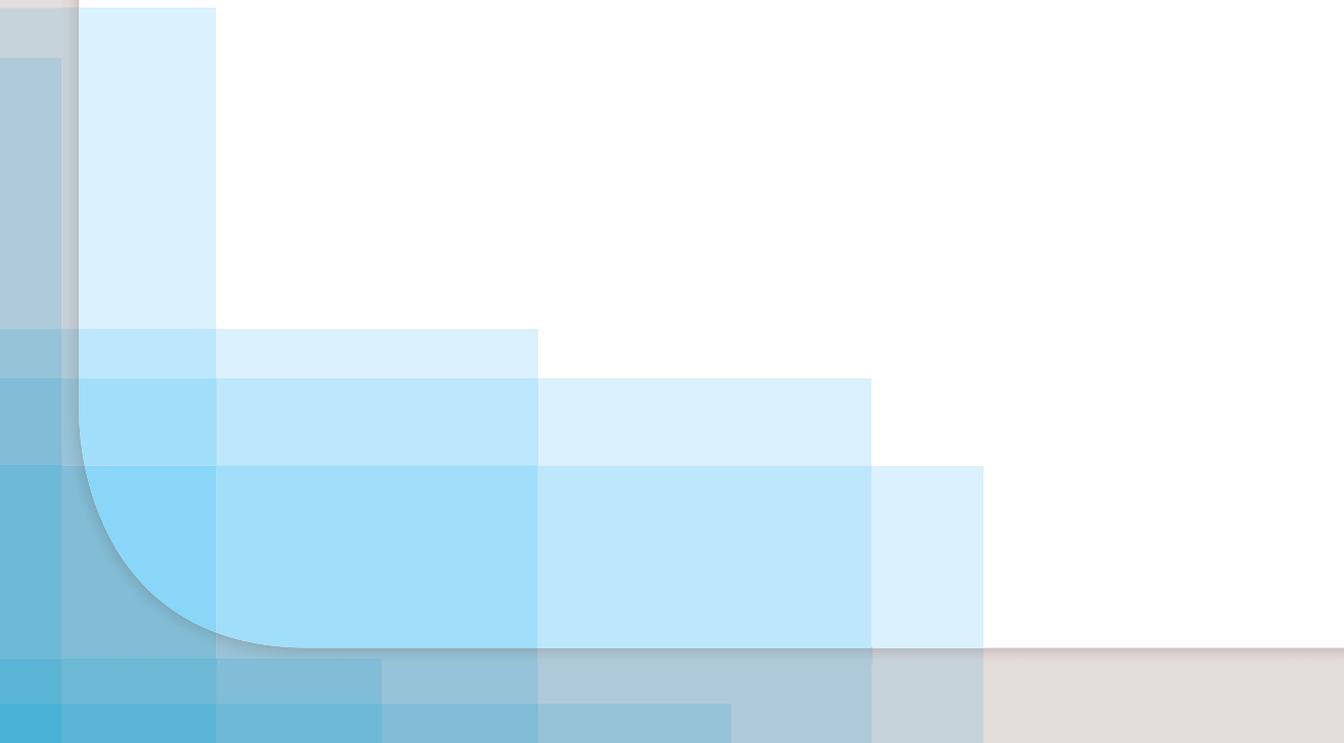
Sandro Montresor pointed out that the joint database on intangibles, while extremely valuable, has been achieved at some cost with respect to the sensitivity of the data. He asked to what degree, for example, the results would change if one changed the sum of the capitalisation factors or depreciation rates. He proposed that greater effort be made to have more of a back-up in the base data to make up for some of what may be lost at the aggregate level.

Tony Clayton pointed out that the current crisis in Europe has overwhelmed government statistical offices, putting pressure on resources that might otherwise be devoted to getting a grip on intangibles. He said the UK office, for example, has abandoned its project on the knowledge economy. The panellists agreed that greater cooperation is needed at the institutional level, but until then it is important that research efforts continue to be supported. Jonathan Haskel said that right now the work on intangibles is still being driven by researchers and there is a need for funding continuity to maintain the momentum.

Marianne Paasi explained that the European Commission (via the social sciences and humanities (SSH) research programme) has supported research projects which have co-created data on intangibles (like Innodrive and Coinvest). She noted that there is a support action in the 2012 SSH open call on data mapping opportunities and that there will be a 2013 SSH call which could support further work on intangibles. She mentioned that there are other funding schemes within the EU's research framework programme with potential to support this area of work; the research community must make sure that it identifies all available funding sources.

Peter Smith noted that the amount of effort being devoted to tracking intangibles at the European level (Eurostat) is insufficient, but it is the job of researchers to convince the policymaking community that there are justified scientific and economic reasons for doing so. Marcel Timmer pointed out that Eurostat can only do what the national statistical agencies are willing to support.

Alessandra Colecchia suggested that work currently being done on the innovation survey could be extended and built upon to further develop data on intangibles. Jonathon Haskel suggested that, moving forward, effort should be made to build on the excellent work already done through EU KLEMS. Tony Clayton and others also noted the value of EU KLEMS.



Conference agenda

Joint database on intangibles: a contribution to European innovation policy and the European research area

- Opening remarks by ERA Director Octavi Quintana Trias

Macro-level intangibles

Methodological and measurement issues about the harmonised estimates across Innodrive, Coinvest and The Conference Board datasets

- Presented by Carol Corrado, The Conference Board
- Comments by users: Alessandra Colecchia, OECD

Using the new intangibles datasets for economic analysis

Role of intangibles for economic performance and policy implications

- Presented by Cecilia Jona Lasinio (LUISS, IS)
- Comments by users: Lucilla Sioli (DG Communications Networks, Content and Technology), Daria Ciriaci (JRC) and Marcel Timmer (University of Groningen)

Methodology for collecting firm-level intangibles data

Application to regional intangible capital accumulation and evidence for metropolitan externalities (in Germany, Finland and the UK)

- Presented by Hannu Piekkola, University of Vaasa
- Comments by users: Georg Licht (ZEW), D'Artis Kancs (JRC), Tony Clayton (UK IPO)

Intangibles and measurement

- Tony Clayton

Panel on future research agenda on intangibles

Open issues, opportunities, how to proceed

- Moderator: Terry Martin
- Bart van Ark, The Conference Board
- Baudoin Regout, Bureau of European Policy Advisers
- Marcel M. Timmer, University of Groningen
- Tony Clayton, UK IPO
- Sandro Montresor, JRC
- Jean Bergevin, DG Internal Market and Services
- Marianne Paasi, DG Research and Innovation
- Georg Licht, ZEW
- Peter Smith, DG Internal Market and Services

European Commission

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A harmonised database on investment in intangibles has been created and made accessible online, thanks to the effort of two EU-funded research projects (Coinvest and Innodrive) and The Conference Board.

This publication presents the proceedings of the conference where the joint database was announced. The database, which covers the 27 Member States of the European Union, Norway and the United States, will improve research productivity in the field of intangibles, contributing to informed policymaking.

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