INTERNATIONAL COMPARISONS OF LABOUR PRODUCTIVITY LEVELS - ESTIMATES FOR 2004, SEPTEMBER 2005

Main findings and revisions to previous estimates

This note describes OECD estimates of productivity levels for 2004, using data available in September 2005. The estimates show that Belgium, Ireland, France, Luxembourg and Norway had the highest productivity levels in the OECD area in 2004, with levels at or above those of the United States (Figure 1 and Table 1). In most of these countries, high labour productivity was accompanied by a low level of labour utilisation, *i.e.* a low level of hours worked per capita. In 2004, Japan's level of productivity was 30 per cent below that of the United States. Productivity levels in Germany were about 9 per cent below the US level, whereas those in Italy were more than 20 per cent below US levels, reflecting large data revisions to Italian estimates of hours worked. Mexico and Turkey had the lowest productivity levels in the OECD area in 2004, of just below 30 per cent of the US level. In most OECD countries at lower levels of income, low productivity accounts for the gap in income levels with the United States. In several countries at higher levels of income, low utilisation of labour accounts for much of the gap.

Despite some changes to data sources used, the estimates for 2004 do not dramatically change the results observed for 2003.

The estimates in this note differ from those released in February 2005 and July 2005 in the following ways:

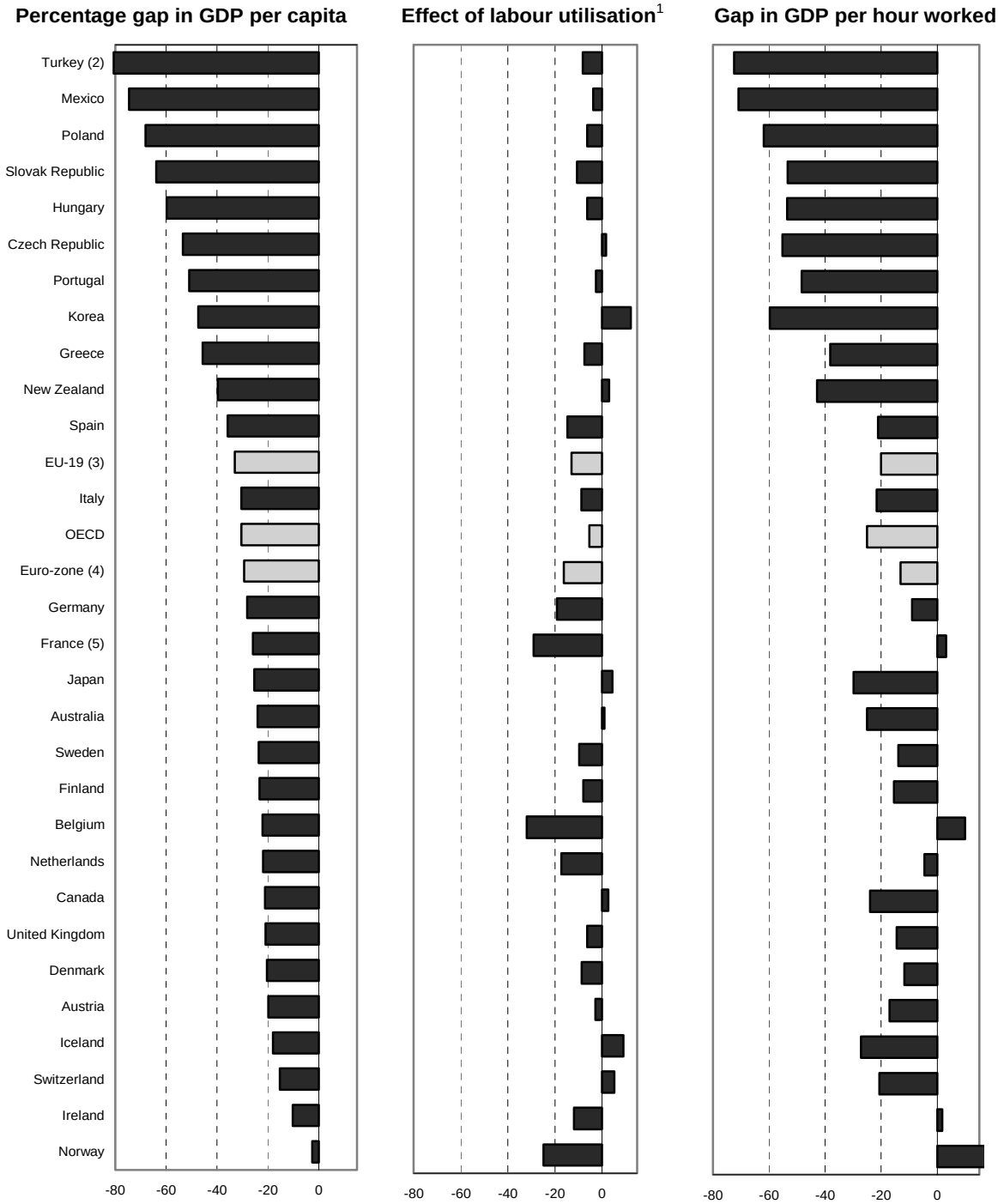
- For several countries, considerable revisions to the data have occurred. This includes substantially higher estimates of hours worked for France and Italy, based on new material from INSEE and ISTAT, as well as incorporation of estimates of hours worked from the national accounts for several OECD countries, including Austria, the Czech Republic, Greece, Italy and the Netherlands. Another revision concerns the United States, where the estimate of total hours worked reflects the official estimates of total hours worked provided to the OECD by the Bureau of Labour Statistics.

- The estimates incorporate the latest available OECD data on GDP, employment and hours worked. The estimates in this note are consistent with those published in the *OECD Compendium of Productivity Indicators*, released in October and available on the website for the OECD Productivity Database: www.oecd.org/statistics/productivity

- The next update of OECD productivity levels will be provided by the end of 2005. This update will also include an assessment of differences with previous OECD estimates of productivity levels and with estimates provided by other organisations.

Figure 1: **Breakdown of GDP per capita into the effects of labour utilisation and GDP per hour worked, 2004**

(Percentage point differences in PPP-based GDP per capita with respect to the United States)



1. Based on total hours worked per capita.
2. GDP for Turkey is based on the 1968 System of National Accounts.
3. EU members that are also members of the OECD.
4. Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain.
5. Includes overseas departments.

Source: OECD estimates, September 2005.

Introduction

International comparisons of productivity growth can give useful insights in the growth process, but should ideally be complemented with international comparisons of income and productivity levels. An examination of income and productivity levels may give insights into the possible scope for further gains, and also places a country's growth experience in the perspective of its current level of income and productivity. OECD has published estimates of labour productivity levels in various studies (*e.g.* Englander and Gurney, 1994; Pilat, 1997; Scarpetta, *et al.*, 2000; OECD, 2003), and has recently released estimates of productivity on the OECD Internet site, at: www.oecd.org/statistics/productivity

Since the release of OECD estimates of productivity growth in the OECD Productivity Database in March 2004, more attention has turned to the measurement of productivity levels, since these serve as a yardstick of economic performance in many OECD countries. Several statistical agencies and international organisations, including Eurostat, the UK Office of National Statistics, the US Bureau of Labor Statistics, and the International Labour Organisation, now release estimates of labour productivity levels, as do some academic institutions, such as the Groningen Growth and Development Centre, and some private institutions, such as the Conference Board. In several instances, notably in the case of Eurostat and the ONS, estimates of labour productivity levels serve as official yardsticks of economic performance and are used to measure progress with regards to explicit policy targets.

Given the importance attached to labour productivity levels, it is unfortunate that there is still considerable variation in the currently available estimates. Primarily, this seems due to differences in the choice of basic data and methodology. Indeed, much of the differences can be brought back to how different organisations select and combine information on the three components of labour productivity levels at the economy-wide level. These components are gross domestic product, labour input and a conversion factor for total GDP (typically a purchasing power parity or PPP) that is needed to translate output in national currency units to a common currency.

This note briefly discusses some of the main measurement issues for these components, as well as the different data choices that can be made. It focuses on the current OECD approach to measuring labour productivity levels, but also refers to other possible approaches, where appropriate. The discussion focuses on comparisons of labour productivity at the economy-wide level; the estimation of productivity levels for individual industries raises additional measurement issues that go beyond the scope of this paper.[1]

Output: comparability and data choices

Most comparisons of labour productivity levels focus on GDP as the measure of output. Other measures of aggregate output, such as GNP or national income, have also been used in a few studies, but are not considered here. The measurement and definition of economic output is treated systematically across countries in the 1993 System of National Accounts (SNA 93). Most countries in the OECD area have now implemented the 1993 SNA, Turkey being the only exception, which implies that its level of GDP is likely to be somewhat understated relative to other OECD countries. Despite the harmonisation of GDP estimates through the 1993 SNA, there are some differences in estimation methods across countries, however (Ahmad, *et al.*, 2003). These typically have only a small effect on growth rates, but may be substantially more important for comparisons of output and productivity levels. Some of the main differences that are known to affect GDP levels are the following (Ahmad, *et al.*, 2003):

- ***Expenditure on military equipment.*** The coverage of government investment in the US National Income and Product Accounts (NIPA) is more extensive than that recommended by the SNA,

1 . A forthcoming OECD reader discusses these issues in greater detail.

since it includes expenditures on military equipment (aircraft, ships, missiles) that are not considered assets by the SNA. The national accounts in most other OECD countries strictly follow the SNA in this matter. As the amount of public investment affects GDP, this results in a statistical difference in the measurement of GDP. Convergence on this issue is expected in the next edition of the SNA, in 2008. In the meantime, the OECD publishes data in its Annual National Accounts Database for the United States which adjust for this difference.

- ***Financial Intermediation Services.*** Most banking services are not explicitly charged. Thus, in the SNA, the implicit production of banks is estimated using the difference between interests received and paid. All OECD member countries have estimated this part of bank production, known as "Financial Intermediation Service Indirectly Measured" or "FISIM". While it is relatively straightforward to recognise and estimate FISIM, the key problem is breaking it down between final consumers (households) and intermediate consumers (business and government). Only the first part has an overall impact on GDP. In the United States, Canada and Australia, such a breakdown has been estimated in the national accounts for some time, in accordance with the SNA. In Europe and Japan, the implementation of a breakdown between final and intermediate consumers has been delayed. The recent comprehensive revision of the US accounts has significantly reduced the difference in GDP levels linked to this factor to just over 1% of GDP, roughly halving the impact on growth. The EU member states and Japan are currently in the process of implementing the allocation of FISIM in their accounts. This methodological difference should thus be mostly eliminated in 2005, but will still affect comparisons of GDP and productivity levels as long as countries have not all implemented the new method.

- ***Software investment.*** Another significant issue in the comparability of GDP concerns the measurement of software. The 1993 SNA recommended that software expenditures be treated as investment as long as the acquisition satisfied conventional asset requirements. This change added nearly 2% to GDP for the United States, around 0.7% for Italy and France, and about 0.5% for the United Kingdom. Doubts on the comparability of these data were raised when comparing "investment ratios", which are defined as the share of software expenditures that are recorded as investment to total expenditures in software. These ratios range from under 4% in the United Kingdom to over 70% in Spain (Lequiller, et al., 2003; Ahmad, 2003). *A priori*, one would expect that these are roughly the same across OECD countries. An OECD-Eurostat Task Force confirmed that differences in estimation procedures contributed significantly to the differences in software capitalisation rates, and a set of recommendations describing a harmonised method for estimating software were formulated (Lequiller, *et al*, 2003; Ahmad, 2003). Most of these recommendations will be implemented by countries, but this will only happen gradually. Differences in software measurement will therefore continue to have an impact on the comparability of GDP levels for some time to come.

- ***The informal economy.*** Another factor that may influence the comparability of GDP across countries is size of the non-observed economy. In principle, GDP estimates in the national accounts take account of this part of the economy. In practice, questions can be raised about the extent to which official estimates have full coverage of economic activities that are included in GDP according to the SNA, or to which extent there some under-reporting is involved. Large differences in coverage could substantially affect comparisons of productivity levels.

It is not clear, *a priori*, how large the impact of these, and possible other, differences is on GDP levels. What is clear, however, is that there is a margin of uncertainty associated with the comparability of levels of GDP across countries. Consequently, there is also a range of uncertainty associated with estimates of productivity levels; small differences between countries (of a few percentage points) will obviously fall within this range of uncertainty. This is important in interpreting estimates of productivity levels; countries

within a small range of income and productivity levels may not have income and productivity differences that are statistically or economically significant (Schreyer and Koechlin, 2002; Van Ark, 2004).

The data choices for GDP are fairly uniform across different sources. In the OECD estimates of productivity levels, data on GDP are derived from OECD's *Annual National Accounts* (ANA). The data from ANA are based on OECD's annual national accounts questionnaire to OECD member countries. The data resulting from this questionnaire may differ somewhat from national sources and are more comparable across countries than those derived from OECD's quarterly national accounts (or the *OECD Economic Outlook* database), thanks to some small methodological adjustments that are made. For example, the US GDP estimates are adjusted for expenditure on military equipment, as discussed above. However, the differences with other OECD sources, such as the *Quarterly National Accounts* and the *Economic Outlook* database, are minor for most countries.

For two countries, Australia and New Zealand, the OECD's Annual National Accounts provides GDP estimates for fiscal years. This creates an inconsistency with other countries, since comparisons of productivity levels ideally should correspond to the same (calendar) year. However, this problem is considered relatively limited and no adjustment is made.

Labour input: comparability and data choices

Employment

Equally important for international comparisons of productivity levels are comparable measures of labour input. In most comparisons of labour productivity levels, labour input is measured along only two dimensions: the number of persons employed and the total number of hours worked of all persons employed.[2]

Basic data for employment can be derived from several sources, including administrative records, labour force surveys and establishment or enterprise-based surveys. Labour force surveys are typically conducted to provide reliable information about personal characteristics of the labour force, such as educational attainment, age, or the occurrence of multiple job holding, as well as information about the jobs (*e.g.* hours at work, industry, occupation and type of contract). Compared with most other statistical sources on employment, labour force surveys are quite well standardised across OECD countries as most countries collect their numbers on the basis of agreed guidelines, and therefore they pose few problems for international comparisons. In addition, labour force surveys have fairly comprehensive coverage of the economy. However, they are based on a national concept, which implies that they exclude non-resident workers (commuters) that are quite important for some OECD countries. Moreover, they may have lower and upper age thresholds and may exclude institutional households. Despite these shortcomings, labour force surveys are often an important source of information for comparisons of productivity levels for the aggregate economy.

The main difficulty with employment estimates from labour force surveys is that the data are not necessarily consistent in coverage with other data needed, notably GDP and hours worked. Labour force surveys are mostly defined within geographic boundaries, whereas, for example, national accounts are defined within economic boundaries. This implies, for example, that a country's military bases and diplomatic premises on foreign soil are part of its economic territory, and that the residence of an enterprise is determined according to its "centre of economic interest".

2 . A possible third dimension concerns labour composition. This dimension is currently not considered in the OECD approach.

A second major source of employment data is therefore the national accounts. Following the introduction of SNA 1993/ESA 1995 many countries now provide data on employment in the framework of the national accounts. In principle, national accounts information on employment is preferable over labour force surveys, due to the conceptual issues discussed above and since the national accounts are likely to integrate a wider range of basic source data on employment.

In practice, the concepts and actual compilation of the national accounts estimates of employment are not yet as well standardised as labour force surveys. One issue is conceptual; most European countries provide data on persons employed in their national accounts, as is also the case with the labour force surveys. In several other OECD countries, including Austria, Canada, Greece, Japan, the United Kingdom and the United States, the national accounts data on employment refers to the number of jobs, which is closer to the concept used in establishment or enterprise statistics. This conceptual difference can be important for the resulting estimate of employment, notably in countries with a high rate of multiple job-holding, such as the United States.

Previous OECD estimates of productivity levels have primarily used the labour force surveys as the preferred source of employment data for productivity comparisons at the aggregate level (see Scarpetta, *et al.*, 2000; OECD, 2003). This was driven by two motivations: 1) the degree of international harmonisation of labour force surveys as regards estimates of employment; 2) the link between employment estimates of labour force surveys and other population and workforce characteristics, such as working-age population and labour force. This link allows estimates of GDP per hour worked to be combined with estimates of GDP per capita, GDP per person of working-age and GDP per person in the labour force.

Recently, and in close co-ordination with Eurostat, OECD decided to move to the national accounts as the preferred source of employment data. This methodological change was driven by three motivations:

1. *Consistency between GDP and employment.* Employment estimates from the national accounts are likely to be more consistent with GDP estimates than employment estimates from labour force surveys, since the employment estimates may incorporate information from other sources of employment. For example, in several countries, *e.g.* Italy, GDP includes an adjustment for the informal economy. This adjustment is also reflected in the employment estimate in the national accounts. The employment number in the labour force survey is substantially lower; using this number for comparisons of productivity levels would lead to an upward bias in the Italian level of labour productivity.

2. *Conceptual.* The national accounts are more appropriate from a conceptual point of view, since they use economic boundaries instead of national boundaries.

3. *Link to OECD estimates of productivity growth.* The OECD estimates of productivity growth, as included in the OECD Productivity Database, are also closely linked to the national accounts.

Despite this change in the source of employment data for OECD estimates of productivity levels, it is important to be cognisant of the statistical problems that are still associated with national accounts information on employment. The first important limitation is that only 19 OECD countries currently include data on total hours worked in the framework of national accounts. These are: Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Korea, Netherlands, Norway, the Slovak Republic, Spain, Sweden, Switzerland and the United States. For most of these countries, the OECD has now moved to estimates of total hours worked from the national accounts. For the United States, the OECD does not use the BEA estimates of total hours worked, but those of the BLS, as these are the official US estimates of total labour input. For the remaining countries, the OECD continues to use data on hours worked that are collected for the *OECD Employment Outlook* from a variety

of sources, including labour force surveys, and combines these with employment figures from national accounts to derive an estimate of total hours worked (see below).

An additional problem is that little is known about how countries currently integrate different sources of employment information in the national accounts. It is not clear whether this is done in a similar way across countries. Moreover, some countries supply data on persons employed, others on jobs or full-time equivalents. Work is currently underway in several organisations, including the OECD and Eurostat, to examine and improve the measures of employment (and hours worked) that are included in the national accounts. This work will hopefully reduce some of the uncertainties that are associated with employment estimates in the national accounts, and the adjustments that countries make in integrating different sources of employment information.

Hours worked

Estimates of levels of GDP per hour worked require estimates of total hours worked that are consistent across countries and consistent with GDP. For most of the 19 countries for which total hours worked are available in the national accounts (with the exception of the United States), these data are used in the productivity calculations. For the other countries, consistency is currently achieved by matching the hours worked per person that are collected by the OECD for its annual *OECD Employment Outlook* with the national accounts measure of employment for each individual country. Estimates of average hours actually worked per year per person in employment are currently available on an annual basis for 27 OECD countries from the OECD Employment Outlook, whereas estimates of average hours per person in dependent employment are available for two additional countries (see OECD (2004), Statistical Annex Table F). These estimates are available from National Statistical Offices for 20 countries. Employment Outlook estimates for several countries (including Australia, Canada, France, Norway, Sweden and Switzerland) are fully consistent with National Accounts concepts and coverage and are thus typically the same as those derived from the OECD Annual National Accounts Database.

To develop their estimates of average hours worked, countries use the best available data sources for different categories of workers, industries and components of variation from usual or normal working time (e.g. public holidays, annual leave, overtime, absences from work due to illness and to maternity, etc.). For example, in 2 countries (Japan and United States) actual hours are derived from establishment surveys for regular or production/non-supervisory workers in employee jobs and from labour force surveys (LFS) for non-regular or managers/non-supervisory employees, self-employed, farm workers and employees in the public sector. In 3 other countries (France, Germany and Switzerland), the measurement of annual working time relies on a component method based on standard working hours minus hours not worked due to absences plus hours worked overtime. Standard working hours are derived from an establishment survey (hours offered), an administrative source (contractual hours) and the labour force survey (normal hours), respectively. The coverage of workers is extended using standard hours reported in labour force surveys or other sources as hours worked overtime. Vacation time is either derived from establishment-survey data on paid leave or the number of days of statutory leave entitlements. Hours lost due to sickness are estimated from the number of days not worked from social security registers and/or health surveys.

On the other hand, the national estimates for 12 more countries (i.e. Australia, Canada, Czech Republic, Finland, Iceland, Mexico, New Zealand, Poland, Slovak Republic, Spain, Sweden and United Kingdom) rely mainly on labour force survey results. Annual working hours are derived using a direct method annualising actual weekly hours worked, which cover all weeks of the year in the case of continuous surveys. But, for labour force surveys with fixed monthly reference weeks, this method results in averaging hours worked during 12 weeks in the year and, therefore, necessitates adjustments for special events, such as public holidays falling outside the reference week (i.e. Canada and Finland). Finally, estimates of annual working time for 7 other EU member states (Austria, Belgium, Greece, Ireland, Italy,

the Netherlands and Portugal) are derived by the OECD Secretariat for the OECD Employment Outlook by applying a variant of the component method to the results of the Spring European Labour Force Survey (ELFS).

Two other considerations should be kept in mind. First, annual working-time measures are reported either on a job or on a worker basis. To harmonise the presentation, annual hours worked measures can be converted between the two measurement units by using the share of multiple job holders in total employment, which is available in labour force surveys, albeit no further distinction is possible between second and more jobs.[3] This difference is particularly important in matching annual working time estimates to employment estimates. Some countries provide employment estimates in the national accounts on the basis of jobs; for these countries, it is important to ensure that the measure of annual working-time per person that is used reflects jobs instead of workers. In Canada and Japan, the estimates of average hours worked already refer to hours per job. For the United Kingdom, the national accounts estimates of employment also refer to jobs, but preference has been given to employment estimates from the ONS labour force survey, since these are consistent with official UK productivity estimates.

Second, given the variety of data sources, of hours worked concepts retained in data sources, and of measurement methodologies (direct measures or component methods[4]) to produce estimates of annual working time, the quality and comparability of annual hours worked estimates are constantly questioned, and are subject to at least two probing issues:

- Labour force survey-based estimates are suspected of over-reporting hours worked compared to work hours reported in time-use surveys, in particular for those working long hours, like managers and professionals.

- Employer survey-based estimates do not account for unpaid overtime hours and are sometimes suspected of under-reporting hours worked, with consequences on productivity levels and growth.

The comparability of measures of hours worked across OECD countries thus remains an issue, and work is currently underway, notably through the Paris Group, the UN city group on Labour and Compensation, to further improve the available measures of hours worked. Data on hours worked are best suited for comparisons of trends over time, although comparisons of the level of average annual hours of work for a given year can be informative if the cross-country differences are sufficiently large.

Purchasing power parities for international comparisons

The comparison of income and productivity across countries also requires purchasing power parity (PPP) data for GDP. Exchange rates are not suitable for the conversion of GDP to a common currency, since they do not reflect international price differences, and since they are heavily influenced by short-term fluctuations. The estimates used by the OECD are derived from its joint programme with Eurostat and refer to current-price PPPs (Schreyer and Koechlin, 2002). For the current set of comparisons, the most recent PPP benchmark comparison (for 2002) is used as the basis for the estimates.

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3. For example, the BLS-Office of Productivity and Technology (OPT) estimates of annual hours of work for the United States are reported on a (per) job basis and are later converted by the OECD Secretariat to a per worker basis by multiplying the job-based annual hours of work by (1 + CPS based share of multiple jobholders in total employment).

4 . However, both methods can be summarised by the following identity: Annual hours per worker = Standard weekly hours worked x Number of weeks actually worked over the year = Weekly hours actually worked x 52 weeks, considering weekly reference period for reporting hours worked.

The OECD does not recommend the use of PPP-adjusted estimates of GDP in time series, because of the difficulty to obtain PPPs that are consistent over time. This is why only **one year** of productivity **level** comparisons is included in the OECD Productivity Database. Users interested in adding a time dimension to this one year level comparison should use the corresponding database on productivity growth, which gives appropriate indices of productivity growth for individual OECD countries over a long time period.

OECD estimates of labour productivity levels for 2004, September 2005

Clearly, data for international comparisons of income and productivity are not perfect and some choices between different sources have to be made. In the OECD approach, GDP is derived from the OECD ANA database, which incorporates the latest comparative information on GDP from OECD member countries. Data on employment for most countries are also from the OECD national accounts as these should have a better correspondence to the estimates of GDP. For a limited number of countries, no appropriate employment estimates are currently available from the national accounts, in which case employment is derived from the OECD Labour Force Statistics. Estimates of hours worked are either from the national accounts, or from the OECD Employment Outlook, as discussed above. To convert GDP to a common currency, the OECD uses current PPPs, which are developed in the OECD-Eurostat PPP programme.

Table 1 presents the resulting productivity level estimates for 2004. In this year, Belgium, France, Ireland, Luxembourg and Norway had levels of GDP per hour worked that were higher or comparable to the United States. The productivity level of the Euro-zone was just under 90 per cent of the US level in 2004, whereas that of the EU-19 (all EU members that are also members of the OECD) was 80 per cent of the US level. Turkey and Mexico had the lowest productivity levels in the OECD area, at 28 and 29 per cent of the US level, respectively.

These estimates still require further work in the following ways:

1. The estimates of annual hours worked per person for several OECD countries are not yet consistent with the national accounts. Data on hours worked currently reach the OECD through two data collections. First, 29 OECD countries currently provide data on hours worked to the annual data collection for the *OECD Employment Outlook*; 7 of these countries provide the OECD with estimates of annual hours worked that are consistent with national accounts concepts and coverage. Secondly, 19 countries provide estimates of total hours worked in the framework of the national accounts for inclusion in OECD's Annual National Accounts. Further investigation of these estimates of hours worked is needed.

2. The employment estimates that are currently incorporated in the national accounts are not necessarily consistent across countries or with the corresponding estimate of GDP. Addressing this problem will require further statistical work.

3. For analytical purposes, it is important that estimates of GDP per hour worked are combined with estimates of GDP per capita and estimates of GDP per person in the labour force and GDP per person of working age. The national accounts currently often do not include the necessary information on working-age population and labour force, and such data have commonly been derived from labour force statistics. The OECD's change in method towards the national accounts as the main source of employment information requires that the link between labour force statistics (i.e. national concepts) and national accounts estimates of productivity (i.e. domestic concepts) is addressed.

Table 1: **OECD estimates of labour productivity for 2004, September 2005**

	GDP, million national currency units, based on ANA	PPP for total GDP, 2004	GDP, million USD (Col. 1 / Col. 2)	Employment (1000 persons)[2]	OECD source for employment[1]	Annual average hours worked, corresponding to employment estimate[3]	OECD source for average hours worked[1]	Total hours worked (million hours)	GDP per hour worked, USD	GDP per hour worked, USA=100
	(1)	(2)	(3)	(4)		(5)		(6)	(7)	(8)
Australia[4]	837,104	1.37	611,025	9,703	ANA	1816	Empl. Outl.	17,617	34.7	75
Austria	237,039	0.91	260,482	4,145	ANA	1636	ANA	6,781	38.4	83
Belgium	283,752	0.88	322,445	4,167	ANA	1522	Empl. Outl.	6,342	50.8	110
Canada	1,270,760	1.27	1,000,598	16,232	ANA	1751	ANA	28,425	35.2	76
Czech Republic	2,750,256	14.58	188,632	4,704	ANA	1938	ANA	9,115	20.7	45
Denmark	1,446,471	8.46	170,978	2,758	ANA	1517	ANA	4,183	40.9	88
Finland	149,725	0.94	159,282	2,367	ANA	1719	ANA	4,068	39.2	85
France	1,648,369	0.90	1,831,521	24,873	ANA	1543	ANA	38,369	47.7	103
Germany	2,215,650	0.94	2,357,074	38,868	ANA	1440	ANA	55,962	42.1	91
Greece	167,169	0.70	238,813	4,018	ANA	2075	ANA	8,337	28.6	62
Hungary	20,338,182	126.19	161,171	3,879	ANA	1933	ANA	7,498	21.5	46
Iceland	858,921	90.08	9,535	156	LFS	1810	Empl. Outl.	283	33.7	73
Ireland	146,279	1.01	144,831	1,873	ANA	1642	Empl. Outl.	3,076	47.1	102
Italy	1,351,328	0.84	1,608,724	24,496	ANA	1810	ANA	44,343	36.3	78
Japan	505,160	133.28	3,790,215	65,224	ANA	1789	Empl. Outl.	116,697	32.5	70
Korea	778,444,600	774.37	1,005,262	22,533	ANA	2394	ANA	53,947	18.6	40
Luxembourg	25,664	0.98	26,188	301	ANA	1556	Empl. Outl.	468	55.9	121
Mexico	7,634,926	7.29	1,047,315	42,059	ANA	1848	Empl. Outl.	77,734	13.5	29
Netherlands	466,310	0.92	506,859	8,233	ANA	1394	ANA	11,476	44.2	95
New Zealand[4]	145,752	1.49	97,820	2,026	LFS	1826	Empl. Outl.	3,700	26.4	57
Norway	1,685,552	9.48	177,801	2,303	ANA	1364	ANA	3,140	56.6	122
Poland	883,656	1.83	482,872	13,795	ANA	1983	Empl. Outl.	27,355	17.7	38
Portugal	135,079	0.66	204,665	5,057	ANA	1694	Empl. Outl.	8,567	23.9	52
Slovak Republic	1,325,486	17.21	77,018	2,056	ANA	1735	ANA	3,567	21.6	47
Spain	837,557	0.77	1,087,736	18,232	ANA	1633	ANA	29,779	36.5	79
Sweden	2,545,750	9.32	273,149	4,322	ANA	1585	ANA	6,849	39.9	86
Switzerland	445,931	1.77	251,938	4,178	ANA	1641	ANA	6,856	36.7	79
Turkey	430,511,477	0.78	551,938	22,291	LFS	1943	GGDC	43,311	12.7	28
United Kingdom	1,164,439	0.62	1,878,127	28,463	ONS	1668	Empl. Outl.	47,464	39.6	86
United States	11,679,200	1.00	11,679,200	138,320	BLS	1825	BLS	252,380	46.3	100
OECD			32,203,216	521,631		1778		927,689	34.7	75
G7			24,145,460	336,475		1735		583,640	41.4	89
North America			13,727,113	196,611		1824		358,539	38.3	83
OECD-Europe[5]			12,419,843	203,243		1643		333,877	37.2	80
EU-19[6]			11,980,569	196,606		1646		323,599	37.0	80
Euro-zone[7]			8,748,621	136,630		1592		217,567	40.2	87

Notes: (1) ANA = Annual National Accounts, LFS = OECD Labour Force Statistics, Empl. Outl. = OECD Employment Outlook; ONS = UK Office of National Statistics; GGDC = Groningen Growth and Development Centre; BLS = US Bureau of Labor Statistics.

(2) The employment estimates for Canada and Japan refer to jobs.

(3) The estimates of annual hours worked for Canada and Japan refer to hours worked per job. ANA data for the Czech Republic, France, Greece, Hungary, Spain and Switzerland are estimates.

(4) GDP estimates for Australia and New Zealand refer to fiscal years.

(5) Excluding Turkey.

(6) All EU members that are also OECD member countries.

(7) Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain.

Source: OECD estimates, September 2005.

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