# Supply \& Use Tables 

 \&
## Input-Output Tables

## User guide

## User guide

providing details on the tables structure, repetition, multipliers, consistency with the N.I.E.
\& insights for economic analysis

## Also see accompanying 'Explanatory note'

## Supply \& Use Tables and Input-Output Tables

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Introduction

1. Overview of Tables $\&$ their structure
2. Consistency with the N.I.E. explained through the 3 methods of calculating GVA/GDP
3. More detail on Supply table \& Use table
4. Intermediate tables

## Supply \& Use Tables and Input-Output Tables

## Contents - continued

5. Input-Output tables
6. Multipliers - Coefficient \& Leontief tables
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## Supply \& Use Tables and Input-Output Tables

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## Introduction

1. Overview of Tables $\&$ their structure
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## Supply \& Use Tables and Input-Output Tables

## Introduction

- Why?
- Legal obligations under European System of Accounts (ESA)2010
- What?
- ESA tables 1500 \& 1600 (Supply \& Use - both annual)
- ESA tables 1610, 1611, 1612, 1620, 1630 (intermediate tables every five years for reference years ending in 0 or 5)
- ESA tables 1700, 1800 \& 1900 (Input-Output - every five years for reference years ending in 0 or 5)
- From 2018 also ESA requirement for constant price (PYP) Supply \& Use tables
- When?
- All by end of year N+3 (i.e. 2013 tables by end 2016)


## Supply \& Use Tables and Input-Output Tables

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1. Overview of Tables $\&$ their structure
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## Supply \& Use Tables and Input-Output Tables

## Overview of Table structure

- Table 1 Supply Table at basic prices (product by industry)
- Table 2 Use Table at purchasers' prices (product by industry)

- Table 3 Use Table at basic prices (product by industry)
- Table 4 Use Table for domestic inputs at basic prices (product by industry)
- Table 5 Use Table for imports at basic prices (product by indust(y) Intermediate
- Table 6 Use Table for trade margins (product by industry)
- Table 7 Use Table for taxes less subsidies on products (product by hidustry)
- Table 8 Symmetric Input-Output Table of total product flows (product by product)
- Table 9 Symmetric Input-Output Table of domestic product flopvs (product by product)
- Table 10 Symmetric Input-Output Table of imported product flews (product by product)
- Table 11 Coefficients of domestic product flows (product by product) Leontief
- Table 12 The Leontief inverse of domestic flows with multipliers fer otherkles inputs (product by product)



## Supply \& Use Tables and Input-Output Tables

## Overview of Table structure - Supply table

Supply at purchasers' prices
Supply at basic prices


- In essence the Supply table is composed of three blocs
- 1) Domestic supply by industry and product - Output method
- 2) Imports
- 3) Trade margins, taxes and subsidies on products


## Supply \& Use Tables and Input-Output Tables

## Overview of Table structure - Use table

Use at purchasers' prices

Intermediate Uses

Product by industry

Industry by product Primary inputs (Compensation of
employees, Operating surplus, taxes and subsidies on production)

- In essence the Use table is composed of three blocs
- 1) Intermediate uses (of both domestic \& imported products) Output method
- 2) Final uses (including personal, government consumption, capital formation) - Expenditure method
- 3) Primary inputs (compensation of employees, net operating surplus, consumption of fixed capital, taxes and subsidies on production) - Income method ${ }_{11}$


## Supply \& Use Tables structure and consistency with the N.I.E.

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3. More detail on Supply table \& Use table
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## Supply \& Use Tables structure and consistency with the N.I.E.

## Consistency with NIE using 3 GDP methods

- Detailed figures lying behind the national accounts estimates can be found in the annual National Income and Expenditure (N.I.E.) publication.
- The 2013 Supply \& Use Tables are consistent with 2013 main aggregates and subaggregates found in the NIE15 which was published in 2016.
- We will examine this consistency using the three methods of calculating GDP as a guide.


Total domestic Output = €393,729 million (in Supply Table)


Using the Output method of GDP calculation, Gross Value Added = Total domestic Output (from the Supply table) minus total intermediate consumption (from the Use table).

For 2013, we can calculate GVA at basic prices as:
Output $€ 393.729$ billion -
Intermediate consumption
€229.437 billion = €164.293
billion

In Table 3 of the NIE, we see Item 51 (GVA at basic prices) is $€ 164.293$ billion as in Use table.

Available by industry: NACE 1-3 industry GVA = €8.608 billion $€ 6.445$ billion = €2.163 billion

GVA by the Output method = Output (Supply table) - Intermediate consumption (Use table)

## NIE2015 Table 3 (published July 2016)



## Supply \& Use Tables consistency with the N.I.E.

## Consistency with NIE - GVA and GDP

- The 2013 difference between GVA at basic prices $€ 164.293$ billion and GDP $€ 180.209$ billion is the addition of product taxes €16.996 billion and subtraction of product subsidies €1.079 billion


## NIE2015 Table 3 (published July 2016)

## Table 3 Gross Value Added at Factor Cost by Sector of Origin and Gross National Income at Current Market Prices



Gross Value Added at basic prices (GVA)
= NIE Item 51 =
€164,293 million in 2013 plus Product taxes $=$ NIE Item $52=$ €16,996 million minus
Product subsidies
= NIE Item 53 =
$€ 1.079$ billion
=
Gross domestic product (GDP) = NIE Item 54 =

2013 Supply Table - Table 1 (published 2016)


Taxes and subsidies on products (to go from GVA to GDP)

|  |  |  |  | $\frac{\text { I }}{\frac{5}{2}}$ |  |  |  |  |  |  | Using the Income method of GDP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NACE | Products $\begin{aligned} & \text { Agriculture, forestry and fishing }\end{aligned}$ | 7,307 | 2,135 | - | - | -19 | 107 | 1,784 | 4,006 | 11,313 |  |
| 5-9 | Mining, quarrying and extraction | 4,915 | 2,135 345 | - | 22 | 213 | 392 | 1,784 520 | 4,006 1,494 | 11,313 6,409 | calculation, Gross Value Added |
| 10-12 | Food \& beverages and tobacco products | 8,661 | 10,430 3 3 | 111 | 1 | 53 | 311 549 | 20,119 | 31,026 4,781 | 39,687 5 5 |  |
| $\begin{gathered} 13-15 \\ 16 \end{gathered}$ | Textiles, wearing apparel and leather products Wood and wood products (excl furniture) | ${ }_{953}^{955}$ | $\begin{array}{r}3,798 \\ \hline 101\end{array}$ | - | - | 43 10 | 549 -139 | 391 <br> 404 <br> 10 | $\begin{array}{r}4,781 \\ \hline 766\end{array}$ | 5,736 1,329 | mpensation of employees + Net |
| 17 | Pulp, paper and paper products | 1,119 | 347 |  | - | 3 | 7 | 252 | 609 | 1,729 | mpensation of employees + Net |
| 18 $19,31,32$ | Printed matter and recorded media | 1,026 8,086 | 280 6,230 | - | 22 | 30 908 | 152 61 | 500 8,379 | 963 15,600 | 1,988 23,686 |  |
| 20 | Chemicals and chemical products | 6,111 | 1,093 |  | 22 | -87 | 548 | -8,098 | 14,825 | 23,686 20,936 | operating surpius + Consumption of |
| 21 | Basic pharmaceutical products | 5,078 | 1,509 | - | 1,934 | 1,740 | 412 | 31,031 | 36,625 | 41,703 |  |
| 22 23 23 | Rubber and plastics ${ }^{\text {R }}$ | 2,158 1,462 | 507 212 | - | - | 17 9 | -15 | 1,019 331 | 1,527 <br> 407 | 3,685 1,869 | fixed capital + Taxes on production |
| 24 | Basic metals | 1,968 | 7 |  | - | - | 45 | 679 | 731 | 2,699 |  |
| 25 26 26 | Fabricated metal products | 1,781 | 285 |  |  | 146 | 60 | 1,374 | 1,866 | 3,647 | Subsidies on producti |
| 26 <br> 27 | Computer, electronic \& optical products Electrical equipment | 4,373 1,722 | 575 311 |  | - | 1,790 380 | 366 140 | $\begin{aligned} & 9,281 \\ & 1,015 \end{aligned}$ | 12,012 1,847 | $\begin{array}{r} 16,386 \\ 3,568 \end{array}$ | Subsidies on production |
| 28 | Machinery and equipment n.e.c. | 2,523 | 44 |  | - | 2,082 | -201 | 2,376 | 4,300 | 6,823 |  |
| 29 30 | Motor vehicles, trailers and semi-trailers | 944 3,410 | 2,797 | - | - | 1,498 | -151 | 285 | 4,429 | 5,373 |  |
| 33 | Repair/installation of machinery \& equipment | 3,410 817 | 43 | - | - | 6,576 | 192 | 93 | $\begin{array}{r} 6,904 \\ 62 \end{array}$ | 10,314 880 |  |
| 35 36 | Electricity and gas supply | 4,388 | 2,321 |  | 179 | 5 | 136 | 7 | 2,648 | 7,036 581 | For 2013, we see that total GVA at |
| 36 $37-39$ | Water collection, treatment and supply Sewerage, refuse and remediation services | 113 717 | 309 432 |  | 159 319 | $\square_{3}$ | 96 |  | 468 851 | $\begin{array}{r} 581 \\ 1,567 \end{array}$ |  |
| $41-43$ | Construction and construction works | 2,659 1,234 | 532 | - | - | 9,398 | - |  | $\begin{array}{r}9,931 \\ \hline 323\end{array}$ | 1,569 12,599 1,556 | basic prices in the Use table is COE |
| 45 46 | Wholesale \& retail trade/repair of vehicles Wholesale trade | $\begin{array}{r}1,234 \\ 11,646 \\ \hline\end{array}$ | 323 319 |  | - | 589 |  | 10,991 | 323 11,899 | 1,556 23,545 |  |
| 47 49 | Retail trade | 208 | 88 | - | - |  |  |  | 95 | 303 | €71.646 billion + NOS €63.942 |
| 49 50 | Land transport services Water transport services | 1,653 | 2,027 |  | 246 | o |  | 271 | 2,544 | 4,197 64 |  |
| 51 52 52 | Air transport services | 1,495 | 1,404 | - | - | - |  | 4,023 | 5,426 | 6,921 | billion + CFC $£ 28452$ billion + net |
| 52 53 | Warehousing Postal and courier services | 1,888 789 | 222 374 | - | - | 1 |  | 640 | 223 1,013 | 2,110 1,802 | Dilion + CFC €28.452 bilion + net |
| 55-56 | Accommodation and food \& beverage services | $\begin{array}{r}882 \\ \hline 308 \\ \hline 188\end{array}$ | 8,103 |  | 82 | - |  | 1,922 | 10,025 | 10,907 |  |
| $58-60$ 61 | Publishing, film and broadcasting services Telecommunications services | $\begin{aligned} & 002 \\ & 3,088 \\ & 1,882 \end{aligned}$ | 1,111 2,356 |  | 182 81 | 2,152 13 |  | 12,171 538 | $\underset{\substack{15,617 \\ 2,989}}{ }$ | 18,625 4,871 | taxes €0.252 bllion = |
| 62-63 | Computer consultancy; data processing | 13,590 | 260 |  | - | 2,135 |  | 31,563 | 33,958 | 47,548 |  |
| 64 65 | Financial intermediation services Insurance, reinsurance and pension funding | $\begin{array}{r}13,474 \\ 8,364 \\ \hline\end{array}$ | 1,424 1,235 |  | 299 | 27 7 |  | $\begin{aligned} & 7,889 \\ & 8,195 \end{aligned}$ | 9,340 9,736 | $\begin{aligned} & 22,814 \\ & 18,100 \end{aligned}$ | 164.293 oilion Gross Value Added |
| 66 | Other financial activities | 4,031 | 478 |  |  | 6 |  | 678 | 1,161 | 5,192 |  |
| 68 | Real estate services | 3,089 | 13,144 |  | 821 | 159 |  |  | 14,123 | 17,212 |  |
| 69-70 | Legal and accounting services; mgt consultancy Architectural and engineering services | $\begin{array}{r}10,611 \\ 1,164 \\ \hline\end{array}$ | 211 12 |  |  | 849 312 |  | $\begin{array}{r}346 \\ 328 \\ \hline 1\end{array}$ | $\begin{array}{r} 1,406 \\ 653 \end{array}$ | 12,018 |  |
| 72 | Scientific research and development services | 6,767 |  |  | 150 | 395 |  | 1,147 | 1,692 | 8,458 |  |
| 73 | Advertising and market research services | 5,352 | 35 |  | - | 5 |  | 150 | 190 | 5,541 | see that |
| $74-75$ 77 | Other professional, scientific services Rental and leasing services | 8,408 46,142 1,223 | 156 999 |  | - | 311 0 |  | 3,797 12,631 | 4,265 13,630 | 12,672 <br> 59 <br> 972 <br> 1 |  |
| 77 78 | Rental and leasing services Employment services | 46,142 <br> 1,223 | 999 17 | - | - | ${ }_{0}^{\circ}$ |  | 12,631 | 13,630 17 | 59,772 1,240 | Item 51 is GVA at basic prices is |
| 79 | Travel and tourism service activities | 171 | 384 |  | - |  |  |  | 384 | 555 |  |
| $\begin{gathered} 80-82 \\ 84 \end{gathered}$ | Security, office \& business support services Public administration | 2,958 810 | 37 75 | - | 9,845 | 64 115 |  | 41 | 101 10,076 | 3,059 10,886 | $€ 164.293$ billion as in the Use table. |
| 85 | Education services | 1,802 | 2,609 | - | 5,676 | 548 |  |  | 8,833 | 10,635 |  |
| 86-88 | Human health and social work services | 1,162 | 2,537 | 1,173 | 10,656 | 31 |  | 256 | 14,653 | 15,814 |  |
| $90-92$ 93 | Cultural, arts and gambling activities | 427 | 1,057 | - | - | 163 |  | 405 | 1,626 | 2,053 |  |
| 93 94 | Recreation and sports activities Membership organisation services | 691 <br> 454 <br> 6 | 457 831 | 541 | - | $\stackrel{\square}{-}$ |  | 115 | $\begin{array}{r} 573 \\ 1,372 \end{array}$ | $\begin{aligned} & 1,264 \\ & 1,826 \end{aligned}$ |  |
| 95 | Repair of consumer goods | 93 | 27 |  | - | - |  |  | 27 | 120 | Again a detailed split of this total is |
| $\begin{aligned} & 96 \\ & 97 \end{aligned}$ | Other personal service activities Private households with employed persons | 489 | 873 142 | - | - | 1 |  |  | 874 142 | 1,363 142 | ain a detailed split of this total |
|  | Total intermediate consumption | 29437 | 78,115 | 1,826 | 30,593 | 32,867 | 2,940 | 191,345 | 337,686 | 567,122 | availabe by industry in the Use |
|  | Compensation of Employees |  |  |  |  | ciflfob a | stment | -162 | -162 | -162 | vailable by industry in the Use |
|  | Operating surplus, net Consumption of fixed capita Net taxes (taxes less subsidies) on productio | $\begin{gathered} 63,942 \\ 28,452 \\ 252 \end{gathered}$ |  |  |  | Exports (a) | er NIE) | 191,183 | 337,523 | 566,960 | table. |
|  | Gross value added at basic prices | 420 |  |  |  |  |  |  |  |  |  |
|  | Output at basic prices ( = last row of Table 1) | 393,729 |  |  |  |  |  |  |  |  | 20 |

## NIE2015 Table 1 (published July 2016)

## Table 1 Net Value Added at Factor Cost and Net National Income at Market Prices



## ${ }^{1}$ Preliminary

${ }^{\wedge}$ This represents the earnings of the ow ners of large non incorporated businesses (e.g. large partnerships) which are similar in their economic anc financial behaviour to companies of an equivalent size.


## NIE2015 Table 1 (published July 2016)

## Table 1 Net Value Added at Factor Cost and Net National Income at Market Prices



Compensation of Employees (COE) $=$


$$
=
$$

$$
636+54+65,684+
$$

$$
5,272
$$

$$
=
$$

$$
€ 71,646 \text { million in }
$$

$$
2013
$$

## ${ }^{7}$ Preliminary

${ }^{\wedge}$ This represents the earnings of the ow ners of large non incorporated businesses (e.g. large partnerships) which are similar in their economic and financial behaviour to companies of an equivalent size.


Compensation of Employees = €71,646 million (in primary inputs at foot of Use table)


2013 Use Table - Table 2 (published 2016)




Net taxes (taxes less subsidies) on production $=€ 252$ million (in primary inputs of Use table)

| (Note the sectors here are based on NAC | For further details see the methodology notes) |  |  |  |  |  | $€$ million |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | ESA Code | 2010 | 2011 | 2012 | 2013 | 2014 | $2015{ }^{\top}$ |
| 19. Agriculture, forestry and fishing |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 2,573 | 3,256 | 3,023 | 3,159 | 3,326 | 3,296 |
| Remuneration of employees | D. 1 (Pt) | 620 | 623 | 625 | 690 | 727 | 671 |
| Other | (B. 2 \& B.3) Pt | 1,953 | 2,634 | 2,399 | 2,469 | 2,599 | 2,625 |
| 20. Industry (including building) |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 32,089 | 37,642 | 37,378 | 37,801 | 39,662 | 64,109 |
| Remuneration of employees | D. 1 (Pt) | 14,194 | 14,024 | 13,588 | 14,196 | 14,919 | 16,223 |
| Other | (B. 2 \& B.3) Pt | 18,568 | 23,859 | 23,304 | 23,336 | 24,999 | 48,405 |
| Adjustment for stock appreciation | (B. 2 \& B.3) Pt | -672 | -241 | 486 | 269 | -256 | -519 |
| 20a. Industry |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 30,054 | 35,410 | 34,055 | 33,544 | 34,541 | 58,385 |
| Remuneration of employees | D. 1 (Pt) | 10,184 | 10,690 | 10,521 | 11,006 | 11,274 | 12,133 |
| Other | (B. 2 \& B.3) Pt | 20,543 | 24,961 | 23,048 | 22,269 | 23,523 | 46,771 |
| Adjustment for stock appreciation | (B. 2 \& B.3) Pt | -672 | -241 | 486 | 269 | -256 | -519 |
| 20b. Building and construction |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 2,035 | 2,232 | 3,323 | 4,257 | 5,121 | 5,724 |
| Remuneration of employees | D. 1 (Pt) | 4,010 | 3,334 | 3,067 | 3,190 | 3,645 | 4,091 |
| Other | (B. 2 \& B.3) Pt | -1,975 | -1,101 | 256 | 1,067 | 1,476 | 1,634 |
| 21. Distribution, transport, softw are and communication |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 32,302 | 33,089 | 34,885 | 37,866 | 40,127 | 40,708 |
| Remuneration of employees | D. 1 (Pt) | 17,395 | 17,541 | 18,160 | 19,364 | 19,938 | 21,290 |
| Other | (B. 2 \& B.3) Pt | 14,545 | 15,547 | 16,731 | 18,232 | 19,685 | 18,883 |
| Adjustment for stock appreciation | (B. 2 \& B.3) Pt | 362 | 1 | -6 | 270 | 504 | 536 |
| 22. Public administration and defence |  |  |  |  |  |  |  |
| Remuneration of employees | D. 1 (Pt) | 5,506 | 5,749 | 5,617 | 5,690 | 5,801 | 6,008 |
| 23. Other services (including rent) |  |  |  |  |  |  |  |
| Net value added | (B.1n-D.29+D.39) Pt | 54,557 | 53,538 | 53,291 | 53,394 | 56,965 | 60,556 |
| Remuneration of employees | D. 1 (Pt) | 31,329 | 31,586 | 31,626 | 31,706 | 32,765 | 34,103 |
| Other | (B. 2 \& B.3) Pt | 23,228 | 21,952 | 21,665 | 21,688 | 24,200 | 26,453 |
| 26. Statistical discrepancy (= Item 12) |  | 39 | -149 | -467 | -2,322 | -1,913 | 155 |
| 27. Net value added at factor cost | B.1n-D.29+D. 39 | 127,067 | 133,125 | 133,726 | 135,588 | 143,969 | 174,831 |
| 28. plus Provision for depreciation | P.51c | 25,087 | 25,349 | 26,994 | 28,452 | 30,891 | 61,558 |
|  |  | 796 | 759 | 756 | 772 | 828 | 839 |
| Industry (including building) |  | 6,698 | 6,535 | 6,763 | 6,881 | 6,863 | 33,683 |
| Industry |  | 6,250 | 6,158 | 6,430 | 6,583 | 6,579 | 33,411 |
| Building and construction |  | 448 | 377 | 333 | 298 | 284 | 272 |
| Distribution, transport, softw are \& communicat |  | 5,535 | 5,690 | 6,332 | 6,723 | 6,980 | 8,137 |
| Public administration and defenceOther services |  | 1,295 | 1,282 | 1,306 | 1,323 | 1,360 | 1,422 |
|  |  | 10,763 | 11,083 | 11,837 | 12,753 | 14,860 | 17,476 |
| 29. Gross value added at factor cost | B.1g-D.29+D. 39 | 152,154 | 158,474 | 160,721 | 164,041 | 174,860 | 236,389 |
| 30. Non product taxes <br> 31. Non product subsidies | D. 29 | 1,981 | 2,074 | 2,245 | 2,536 | 2,957 | 3,023 |
|  | D. 39 | -2,212 | -2,335 | -2,465 | 2,204 | -2,191 | -2,444 |
| 32. Gross value added at basic prices | B. 1 g | 151,924 | 158,213 | 160,50 1 | 164,293 | 175,626 | 236,968 |
| 33. Product taxes <br> 34. Product subsidies | D. 21 | 16,311 | 15,945 | 16,341 | 16,9 | 18,514 | 19,758 |
|  | D. 31 | -1,111 | -1,088 | -1,089 | -1,079 | -981 | -911 |
| 35. Gross domestic product at current market | B.1*g | 167,124 | 173,070 | 175,754 | 180,209 | 193,160 | 255,815 |
| 36. Net factor income from the rest of the w orld | D. 1 \& D. 4 (net to abroad) | -28,457 | -33,788 | -33,551 | -28,310 | -29,715 | -53,173 |
| 37. Gross national product at current market p |  | 138,667 | 139,282 | 142,203 | 151,899 | 163,445 | 202,642 |
| 38. EU subsidies | D. 3 (Pt) | 1,494 | 1,698 | 1,632 | 1,450 | 1,318 | 1,571 |
| 39. EU taxes | D. 2 (Pt) | -229 | -240 | -242 | -247 | -275 | -327 |
| 40. Gross national income at current market pi B. $5^{\star} \mathrm{g}$ |  | 139,932 | 140,741 | 143,593 | 153,102 | 164,488 | 203,886 |

Gross Value Added (GVA) at basic prices
$=$
NIE item 32 (and item 51)
$=$
€164,293 million in 2013

NIE2015 Table 2 (\& Table 3) (published July 2016)


Gross value added at basic prices $=€ 164,293$ million (in primary inputs at foot of Use table)


## NIE2015 Table 3 (published July 2016)

## Table 3 Gross Value Added at Factor Cost by Sector of Origin and Gross National Income at Current Market Prices



NIE2015 Table 5 (published July 2016)


|  |  |  |  | $\frac{\text { I }}{\frac{5}{2}}$ |  |  |  |  |  |  | This expenditure figure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { NACE } \\ 1-3 \end{gathered}$ | Products Agriculture, forestry and fishing | 7,307 | 2,135 | . | - | -19 | 107 | 1,784 | 4,006 | 11.313 |  |
| 5-9 | Mining, quarrying and extraction | 4,915 | 2,135 345 | - | 22 | 213 | 392 | 1,784 520 | 1,494 | 11,313 6,409 |  |
| 10-12 | Food \& beverages and tobacco products | 8,661 | 10,430 | 111 | 1 | 53 | 311 | 20,119 | 31,026 | 39,687 | - En 0 033 n |
| ${ }_{16}^{13-15}$ | Textiles, wearing apparel and leather products | 955 | 3,798 | - | - | 43 | 549 | 391 | 4,781 | 5,736 |  |
| 16 17 | Wood and wood products (excl furniture) Pulp, paper and paper products | 953 1,119 | 101 347 | - | - | 10 3 | -139 7 | 404 252 252 | 376 609 | 1,329 1,729 |  |
| 18 | Printed matter and recorded media | 1,026 | 280 | - | - | 30 | 152 | 500 | 963 | 1,988 |  |
| 19,31,32 | Petroleum; furniture; other manufacturing | 8,086 | 6,230 | - | 22 | 908 | 61 | 8,379 | 15,600 | 23,686 | Fron ane |
| 20 | Chemicals and chemical products | 6,111 | 1,093 | - |  | 87 | 548 | 13,098 | 14,825 | 20,936 |  |
| 21 22 | Basic pharmaceutical products | 5,078 | 1,509 | - | 1,934 | 1,740 | 412 | 31,031 | 36,625 | 41,703 |  |
| 22 23 | Rubber and plastics Other non-metallic mineral products | 2,158 1,462 | 507 212 | - | - | 17 9 | -15 | 1,019 331 | 1,527 407 | 3,685 1,869 |  |
| 24 | Basic metals | 1,968 | 7 | - | - | - | 45 | 679 | 731 | 2,699 |  |
| 25 | Fabricated metal products | 1,781 | 285 | - | - | 146 | 60 | 1,374 | 1,866 | 3,647 |  |
| 26 27 | Computer, electronic \& optical products | 4,373 | 575 | - | - | 1,790 | 366 | 9,281 | 12,012 | 16,386 |  |
| 27 28 | Electrical equipment | 1,722 | 311 | - | - | 380 | 140 | 1,015 | 1,847 | 3,568 |  |
| 28 <br> 29 | Machinery and equipment n.e.c. Motor vehicles, trailers and semi-trailers | $\begin{array}{r} 2,523 \\ 944 \end{array}$ | 44 2,797 | - | $\div$ | 2,082 1,498 | -201 -151 | $\begin{array}{r}2,376 \\ \hline 285\end{array}$ | $\begin{aligned} & 4,300 \\ & 4,429 \end{aligned}$ | $\begin{aligned} & 6,823 \\ & 5,373 \end{aligned}$ | Finalconsum |
| 30 | Other transport equipment | 3,410 | 43 | - | - | 6,576 | 192 | 93 | 6,904 | 10,314 |  |
| 33 35 | Repair/installation of machinery \& equipment | 817 | 43 | - | - | 3 | 13 |  |  | 880 |  |
| 35 36 | (Electricity and gas supply $\begin{aligned} & \text { a } \\ & \text { Water collection, treatment and supply }\end{aligned}$ | $\begin{array}{r}4,388 \\ \hline 113\end{array}$ | 2,321 309 | - | 179 159 | 5 | 136 | 7 | $\begin{array}{r} 2,648 \\ 468 \end{array}$ | 7,036 581 |  |
| 37-39 | Sewerage, refuse and remediation services | $\begin{array}{r}717 \\ \hline 169\end{array}$ | 432 |  | 319 | 3 | 96 |  | $\begin{array}{r}851 \\ \hline 930\end{array}$ | $\begin{array}{r}1,567 \\ \hline 12599\end{array}$ | nousenolas + |
| $41-43$ 45 | Construction and construction works Wholesale \& retail trade/repair of vehicles | 2,669 1,234 | 532 323 |  | - | 9,398 |  |  | 9,930 | 12,599 |  |
| 46 | Wholesale trade | 11,646 | 319 | - | - | 589 |  | 10,991 | 11,899 | 23,545 |  |
| 47 49 | Retail trade | 208 | 88 | - | - | 7 |  |  | 95 | 303 |  |
| 49 50 | Leat transport services | 1,653 226 | 2,027 104 | - | ${ }^{246}$ | o |  | 271 311 | $\begin{array}{r} 2,544 \\ 415 \end{array}$ | $\begin{array}{r} 4,197 \\ 641 \end{array}$ | VG. COnSUn@EOM |
| 51 | Air transport services | 1,495 | 1,404 |  | - |  |  | 4,023 | 5,426 | 6,921 |  |
| 52 53 | Warehousing Postal and courier services | 1,888 789 | 222 374 | - | - | 1 |  | 640 | $\begin{array}{r} 223 \\ 1,013 \end{array}$ | $\begin{aligned} & 2,110 \\ & 1,802 \end{aligned}$ |  |
| 55-56 | Accommodation and food \& beverage services | 882 | 8,103 |  | - | o |  | 1,922 | 10,025 | 10,907 | PrP $= \pm$ |
| 58-60 | Publishing, film and broadcasting services | 3,008 | 1,111 |  | 182 | 2,152 |  | 12,171 | 15,617 | 18,625 |  |
| 61 $62-63$ | Telecommunications services | 1,882 | 2,356 |  | 81 | 13 |  | 538 | 2,989 | 4,871 |  |
| $62-63$ 64 | Computer consultancy; data processing | 13,590 | 260 | - | - | 2,135 |  | 31,563 7889 | 33,958 | 47,548 |  |
| 64 65 | Financial intermediation services insurance, reinsurance and pension funding | $\begin{array}{r}13,474 \\ 8,364 \\ \hline\end{array}$ | 1,424 1,235 |  | 299 | 27 7 |  | 7,889 8,195 | 9,340 9,736 | $\begin{aligned} & 22,814 \\ & 18,100 \end{aligned}$ | E18 8 ¢ $4=3$ |
| 66 | Other financial activities | 4,031 | 478 | - | - | 6 |  | 678 | 1,161 | 5,192 | 1,02 |
| 68 $69-70$ | Real estate services | 3,089 | 13,144 | - | 821 | 159 |  |  | 14,123 | 17,212 |  |
| $69-70$ 71 | Legal and accounting services; $m$ mt consultancy Architectural and engineering services | $\begin{array}{r} 10,611 \\ 1,164 \end{array}$ | 211 12 | - | - | 849 312 |  | 346 <br> 328 | 1,406 | 12,018 1,817 |  |
| 72 73 | Scientific research and development services | ${ }^{6,767}$ |  |  | 150 | 395 |  | 1,147 | 1,692 | 8,458 | n! 10n |
| 73 74.75 | Advertising and market research services | $\begin{aligned} & 5,352 \\ & 8,408 \end{aligned}$ | 35 156 |  | - | 511 |  | 150 3,797 | 190 4,265 | 5,541 12,672 |  |
| 77 | Rental and leasing services | 46,142 | 999 | - | - | o |  | 12,631 | 13,630 | 59,772 |  |
| 78 | Employment services | 1,223 | 17 |  | - | - |  |  | 17 | 1,240 |  |
| 79 $80-82$ | Travel and tourism service activities Security, office \& business support services | $\begin{array}{r}171 \\ \hline 2,958\end{array}$ | 384 37 |  | - | 64 |  |  | 384 101 | 555 3,059 | nnilontieureintne |
| 84 | Public administration | 810 | 75 | - | 9,845 | 115 |  | 41 | 10,076 | 10,886 |  |
| 85 $86-88$ | Education services Human health and social work services | 1,802 1,162 | 2,609 2,537 | 1,173 | 5,676 10,656 | 548 31 |  | 256 | 8,833 14,653 1,56 | 10,635 15,814 |  |
| 90-92 | Cultural, arts and gambling activities | 427 | 1,057 | - | - | 163 |  | 405 | 1,626 | 2,053 | n |
| ${ }_{9}^{93}$ | Recreation and sports activities | 691 | 457 | 54 | - | - |  | 115 | 573 | 1,264 |  |
| 94 95 | Membership organisation services | $\begin{array}{r}454 \\ 93 \\ \hline\end{array}$ | 831 27 | 541 |  | - |  |  | 1,372 | 1,826 120 |  |
| $\begin{aligned} & 96 \\ & 97 \end{aligned}$ | Other personal service activities Private households with employed persons | 489 | $142$ |  |  | 1 | - |  | $\begin{aligned} & 874 \\ & 142 \end{aligned}$ | $\begin{array}{r} 1,363 \\ 142 \\ \hline \end{array}$ | the JSe Ta 0 ¢ |
|  | Total intermediate consumption | 229,437 | 78,115 | 1,826 | 30,593 | 32,867 | 2,940 | 191,345 | 337,686 | 567,122 |  |
|  | Compensation of Employees | 71,646 |  |  |  | ciffor a |  | -162 | -162 | -162 |  |
|  | Operating surplus, net <br> Consumption of fixed capital | $\begin{aligned} & 63,942 \\ & 28,452 \end{aligned}$ |  |  |  | ports (as | er NIE) | 191,183 | 337,523 | 566,960 |  |
|  | Net taxes (taxes less subsidies) on production | 252 |  |  |  |  |  |  |  |  |  |
|  | Gross value added at basic prices | 164,293 |  |  |  |  |  |  |  |  |  |
|  | Output at basic prices ( = last row of Table 1 ) | 393,729 |  |  |  |  |  |  |  |  |  |

This expenditure figure of $€ 110,533$ million from Table 5 of the NIE is consistent with the Final consumption of households + NPISH + Govt. consumption plus transfers $=€ 78,115 \mathrm{~m}+$ €1,826m + €30,593 million = €110,533 million figure in the final uses at the right of the Use Table available by detailed product.

## NIE2015 Table 5 (published July 2016)




This Final consumption expenditure of Households and NPISHs figure of €79,940 million from Table 5 of the NIE is consistent with the Final consumption of households + NPISH = $€ 78,115 \mathrm{~m}+€ 1,826 \mathrm{~m}=$ €79,940 million figure in the final uses at the right of the Use Table.

NIE2015 Table 5 (published July 2016)



## NIE2015 Table 5 (published July 2016)



2013 Use Table - Table 2 (published 2016)

|  |  |  |  |  |  |  |  |  |  |  | This Gross Fixed Capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NACE | Products <br> Agriculture, forestry and fishing | 7,307 | 2,135 | - | - | -19 | 107 | 1,784 | 4,006 | 11,313 | Formation (GFCF) figure |
| 5-9 | Mining, quarrying and extraction | 4,915 | 345 | - | 22 | 213 | 392 | 520 | 1,494 | 6,409 |  |
| 10-12 $13-15$ | Food \& beverages and tobacco products Textiles, wearing apparel and leather products | 8,661 955 | 10,430 3,798 | 111 | 1. | 53 43 | $\begin{aligned} & 311 \\ & 549 \end{aligned}$ | 20,119 391 | 31,026 4,781 | 39,687 5,736 |  |
| $13-15$ 16 | Wood and wood products (excl furniture) | 953 | +101 | - | - | 10 | -139 | 404 | 376 | 1,329 |  |
| 17 18 | ( ${ }^{\text {Pulp, paper and paper products }}$ ( ${ }^{\text {Printed matter and recorded media }}$ | 1,119 1,026 | 347 280 | - | - | 3 30 | 7 152 | 252 500 | 609 963 | 1,729 <br> 1,988 <br> 1,98 | of €32,867 milion from |
| 19,31,32 | Petroleum; furniture; other manufacturing | 8,086 | 6,230 | - | 22 | 908 | 61 | 8,379 | 15,600 | 23,686 |  |
| 20 | Chemicals and chemical products | 6,111 | 1,093 | - | - | 87 | 548 | 13,098 | 14,825 | 20,936 |  |
| 21 | Basic pharmaceutical products | 5,078 | 1,509 | - | 1,934 | 1,740 | 412 | 31,031 | 36,625 1,527 | 41,703 |  |
| 22 23 | Rubber and plastics Other non-metallic mineral products | 2,158 1,462 | 507 212 | - | - | 17 9 | -15 -145 | 1,019 331 | $\begin{array}{r}1,527 \\ 407 \\ \hline\end{array}$ | 3,685 1,869 |  |
| 24 | Basic metals | 1,968 | 7 | - | - | - | 45 | 679 | 731 | 2,699 |  |
| 25 | Fabricated metal products | 1,781 | 285 | - | - | 146 | 60 | 1,374 | 1,866 | 3,647 |  |
| 26 27 | Computer, electronic \& optical products Electrical equipment | $\begin{aligned} & 4,373 \\ & 1727 \end{aligned}$ | 575 311 | - | - | 1,790 380 | $366$ | $\begin{aligned} & 9,281 \\ & 1,015 \end{aligned}$ | 12,012 1847 | $16,386$ |  |
| 29 | Motor vehicles, trailers and semi-trailers | 944 | 2,797 | - | - | 1,498 | -151 | 285 | 4,429 | 5,373 |  |
| 30 33 | Other transport equipment | 3,410 | 43 | - | - | 6,576 | 192 | 93 | 6,904 | 10,314 |  |
| 33 35 | Repair/installation of machinery \& equipment Electricity and gas supply | 817 4,388 | 43 2,321 | - | 179 | 3 5 | 16 136 | 7 | 62 2,648 | 880 7,036 | totheperespores |
| 36 | Water collection, treatment and supply | 113 | 309 | - | 159 | - |  |  | 468 | 581 |  |
| 37-39 | Sewerage, refuse and remediation services | 717 | 432 | - | 319 | 3 | 96 |  | 851 | 1,567 |  |
| 41-43 | Construction and construction works | 2,669 | 532 | - | - | 9,398 | - | - | 9,930 | 12,599 |  |
| 45 46 | Wholesale \& retail trade/repair of vehicles | 1,234 | 323 | - | - | 89 | - | 10.99 | 323 11,899 | 1,556 |  |
| 46 47 | Wholesale trade Retail trade | $\begin{array}{r}11,646 \\ \hline 208\end{array}$ | 319 88 | - | - | 589 7 | - | 10,991 | $\begin{array}{r}11,899 \\ \hline 95\end{array}$ | 23,545 303 | figure of -e20 milion |
| 49 | Land transport services | 1,653 | 2,027 | - | 246 | 0 | - | 271 | 2,544 | 4,197 |  |
| 50 | Water transport services | 226 | 104 | - | - | - | - | 311 | 415 | 641 |  |
| 51 52 | Air transport services Warehousing | 1,495 1,888 | 1,404 222 | - | - | 1 | - | 4,023 | $\begin{array}{r}5,426 \\ \hline 223 \\ \hline\end{array}$ | 6,921 2,110 |  |
| 53 | Postal and courier services | 789 | 374 | - | - | - | - | 640 | 1,013 | 1,802 |  |
| 55-56 | Accommodation and food \& beverage services | 882 | 8,103 | - | - | o | - | 1,922 | 10,025 | 10,907 |  |
| 58-60 | Publishing, film and broadcasting services | 3,008 | 1,111 | - | 182 | 2,152 | - | 12,171 | 15,617 | 18,625 |  |
| 61 $62-63$ | Telecommunications services Computer consultancy; data processing | 1,882 13,590 | 2,356 260 | - | 81 | 13 2,135 | - | 538 31,563 | 2,989 33,958 | $\begin{array}{r}4,871 \\ 47,548 \\ \hline\end{array}$ | Gross fixed canita |
| 64 | Financial intermediation services | 13,474 | 1,424 | - | - | 27 | - | 7,889 | 9,340 | 22,814 |  |
| 65 | Insurance, reinsurance and pension funding | 8,364 | 1,235 | - | 299 | 7 | - | 8,195 | 9,736 | 18,100 |  |
| 66 | Other financial activities | 4,031 | 478 | - | 821 | 6 | - | 678 | 1,161 | 5,192 |  |
| 68-70 | Real estate services | 3,089 | 13,144 | - | 821 | 159 | - |  | 14,123 | 17,212 | -nrn tion ficil |
| $\begin{gathered} 69-70 \\ 71 \end{gathered}$ | Legal and accounting services; mgt consultancy Architectural and engineering services | 10,611 1,164 | 211 12 | - | - | 849 312 | - | 346 <br> 328 | 1,406 653 | 12,018 1,817 |  |
| 72 | Scientific research and development services | 6,767 |  | - | 150 | 395 | - | 1,147 | 1,692 | 8,458 |  |
| 73 $74-75$ | Advertising and market research services | 5,352 | 35 | - | - | 5 | - | 150 | 190 | 5,541 |  |
| $74-75$ 77 | Other professional, scientific services Rental and leasing services | 8,408 46,142 | 156 999 | - | - | 311 0 | - | 3,797 12,631 | $\begin{array}{r} 4,265 \\ 13,630 \end{array}$ | $\begin{aligned} & 12,672 \\ & 59,772 \end{aligned}$ | $€ 32867$ million found |
| 78 | Employment services | 1,223 | 17 | - | - | o | - | - | 17 | 1,240 |  |
| 79 | Travel and tourism service activities | 171 | 384 | - | - | - | - | - | 384 | 555 |  |
| 80-82 | Security, office \& business support services | 2,958 | 37 | - | - | 64 | - | - | 101 | 3,059 |  |
| 84 | Public administration | 810 | 75 | - | 9,845 | 115 | - | 41 | 10,076 | 10,886 | n? fin |
| 85 $86-88$ | Education services | 1,802 | 2,609 | 73 | 5,676 | 548 | - |  | 8,833 | 10,635 | Ledad |
| $86-88$ $90-92$ | Cultural, arts and gambling activities | 1,162 | 1,057 | 1,173 | 10,656 | 163 | - | 405 | 14,653 1,626 | $\begin{array}{r}15,314 \\ 2,053 \\ \hline\end{array}$ |  |
| 93 | Recreation and sports activities | 691 | 457 | - | - | , | - | 115 | 573 | 1,264 |  |
| 94 95 | Membership organisation services | 454 | 831 | 541 | - | - | - | - | 1,372 | 1,826 | 0 |
| 95 96 | Repair of consumer goods Other personal service activities | $\begin{array}{r} 93 \\ 489 \end{array}$ | 27 873 | - |  | o | - | - | $\begin{array}{r}27 \\ 874 \\ \hline\end{array}$ | $\begin{array}{r} 120 \\ 1,363 \end{array}$ | ight of the Use Table |
| 97 | Private households with employed persons |  | 142 | - |  |  | - |  | 142 | 142 |  |
|  | Total intermediate consumption | 229,437 | 78,115 | 1,826 | 30,593 | 32,867 | 2,940 | 191,345 | 337,686 | 567,122 |  |
|  | Compensation of Employees | 71,646 |  |  |  | if/fob | tment | -162 | $-162$ | -162 | 202 n ${ }^{2}$ |
|  | Operating surplus, net <br> Consumption of fixed capital | $\begin{aligned} & 63,942 \\ & 28,452 \\ & 252 \end{aligned}$ |  |  |  | Exports ( | er NIE) | 191,183 | 337,523 | 566,960 | again provided by type |
|  | Net taxes (taxes less subsidies) on production Gross value added at basic prices | 252 |  |  |  |  |  |  |  |  |  |
|  | Output at basic prices ( = last row of Table 1) | 393,729 |  |  |  |  |  |  |  |  | - 40 |

NIE2015 Table 5 (published July 2016)



This Changes stocks figure of $€ 598$ million from Table 5 of the NIE minus the Net additions to the breeding stocks figure of - $€ 20$ million plus the Statistical Discrepancy figure of $€ 2,322$ million is consistent with the change in inventories figure of $€ 2,940$ million found in the final uses at the right of the Use Table.


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## NIE2015 Table 5 (published July 2016)

| Table 5 Expenditure on Gross National Income at Curr | ent Market Pric |  |  |  |  |  |  | Exports of goods and services |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Descripion | ESA Code | 2010 | 2011 | 2012 | 2013 | 2014 | $2015{ }^{\top}$ |  |  |  |  |  |  |  |  |
| 79. Personal consumption of goods and services of which: | P. 3 (Pt) | 83,741 | 83,684 | 84,203 | 84,983 | 87,760 | 92,377 |  |  |  |  |  |  |  | NIE item 83 |
| 79(a) Final consumption expenditure of Households and NPISHs |  | 78,785 | 78.726 | 78.961 | 79,940 | 82,566 | 87,260 |  |  |  |  |  |  |  | $=$ |
| $79(b)$ Final consumption expenditure |  |  |  |  |  |  |  |  |  |  |  |  |  |  | €1 |
| of government |  | 4,956 | 4,958 | 5,242 | 5,043 | 5,194 | 5,117 |  |  |  |  |  |  |  | € |
| 80. Net expenditure by central and local government on current goods and services | P. 3 (Pt) | 26,631 | 26,625 | 25,901 | 25,550 | 26,479 | 26,985 |  |  |  |  |  |  |  | 2013 |
| 81. Gross domestic fixed capital formation | P. 51 (P) \& P. 53 | 29,482 | 29,813 | 34,178 | 32,887 | 39,572 | 54,103 |  |  |  |  |  |  |  |  |
| 82. Value of physical changes in stocks of which | P. 51 (PI) \& P. 52 | -561 | 639 | 859 | 598 | 2,827 | 1,293 | Note: Imports andExports are valued as.o.b. in the NIE - freeon board. Imports are |  |  |  |  |  |  |  |
| 82(a) Net additions to the breeding stocks |  | 55 | 19 | 83 |  | 1 | 128 |  |  |  |  |  |  |  |  |
| 83. Exports of goods and services \# | P. 6 | 172,795 | 177,303 | 187,6 | 191,183 | 219,790 | 317,197 |  |  |  |  |  |  |  |  |
| 84. less imports of goods and services \# | P. 7 | -144,925 | -145,143 | -157,516 | 7,314 | -185,182 | -235,985 |  |  |  |  |  |  |  |  |
| 85. Statistical discrepancy (=- Hem 12) |  | -39 | 149 | 467 | 2,32 | 1,913 | 155 |  |  |  |  |  |  |  |  |
| 86. Gross domestic product at current market prices | B.1*g | 167,124 | 173,070 | 175,754 | 180,209 | 193,160 | 255,815 |  |  |  |  |  |  |  | valued as c.i.f. in the |
| 87. Net factor income from the rest of the world | $\begin{aligned} & \text { D. } 1 \text { \& D. } 4 \\ & \text { (net to abroad) } \end{aligned}$ | -28,457 | -33,788 | 33,551 | 28,310 | $-29,715$ | 53,173 |  |  |  |  |  |  |  | S\&UT - cost, insurance |
| 88. Gross national product at current market prices |  | 138,667 | 139,282 | 142,203 | 151,899 | 163,445 | 202,642 |  |  |  |  |  |  |  | difference between the |
| 89. EU subsidies | D. 3 (Pt) | 1,494 | 1,698 | 1,632 | 1,450 | 1,318 | 1,571 |  |  |  |  |  |  |  |  |
| 90. EUtaxes | D. 2 (Pt) | -229 | 240 | -242 | -247 | -275 | -327 |  |  |  |  |  |  |  | wo is relatively small |
| 91. Gross national income at current market prices | B.5*9 | 139,932 | 140,741 | 143,593 | 153,102 | 164,488 | 203,886 | and is shown in anadjustment in the S\&UT |  |  |  |  |  |  |  |
| ${ }^{\dagger}$ Preliminary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \# Excluding factor income flows |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  |  |  |  | $\frac{\text { 咅 }}{\frac{1}{2}}$ |  |  |  |  |  |  | This Exports of good |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \mathrm{NACE} \\ 1-3 \end{gathered}$ | Products $\begin{aligned} & \text { Agriculture, forestry and fishing }\end{aligned}$ | 7,307 | 2,135 | - | - | -19 | 107 | 1,784 | 4,006 | 11,313 |  |
| 5-9 | Mining, quarrying and extraction | 4,915 | 345 | - | 22 | 213 | 392 | 520 | 1,494 | 6,409 |  |
| 10-12 | Food \& beverages and tobacco products | 8,661 | 10,430 | 111 | 1 | 53 | 311 | 20,119 | 31,026 | 39,687 |  |
| $13-15$ 16 | Textiles, wearing apparel and leather products Wood and wood products (excl furniture) | ${ }_{953}^{955}$ | 3,798 101 | - | - | 43 10 | 549 -139 | 391 404 2 | $\begin{array}{r}4,781 \\ \hline 766\end{array}$ | 5,736 1,329 |  |
| 17 | Pulp, paper and paper products | 1,119 | 347 | - | - | 3 | 7 | 252 | 609 | 1,729 |  |
| 18 | Printed matter and recorded media | 1,026 | 280 | - | - | 30 | 152 | 500 | 963 | 1,988 |  |
| $19,31,32$ 20 | Petroleum; furniture; other manufacturing chemicals and chemical products | 8,086 6,111 | 6,230 | - | ${ }^{22}$ | 908 | 61 | 8,379 | 15,600 | 23,686 | -101 183 noliontron |
| 21 21 | Chemicals and chemical produ Basic pharmaceutical products | $\begin{aligned} & 6,111 \\ & 5,078 \end{aligned}$ | 1,093 1,509 | - | 1,934 | 87 1,740 | 548 412 | 13,098 | 14,825 | 20,936 41,703 |  |
| 22 | Rubber and plastics | 2,158 | 507 | - | - | 17 | -15 | 1,019 | 1,527 | 3,685 |  |
| 23 24 24 | Other non-metallic mineral products | 1,462 1,968 1 | 212 7 | - | $-$ | 9 | -145 45 45 | 331 679 | 407 731 1 | 1,869 2,699 |  |
| 24 25 24 | ${ }_{\text {Basic metals }}^{\text {Babict }}$ Fabricated metal products | 1,968 1,781 | 7 285 | - | - | 146 | 45 60 | 679 1,374 | 731 1,866 | $\begin{aligned} & 2,699 \\ & 3,647 \end{aligned}$ | able Cot (TEIS |
| 26 | Computer, electronic \& optical products | 4,373 | 575 |  | - | 1,790 | 366 | 9,281 | 12,012 | 16,386 |  |
| 27 28 | Electrical equipment $\begin{aligned} & \text { Machinery and equipment n.e.c. }\end{aligned}$ | 1,722 2,523 | 311 44 | - | - | 380 2,082 | 140 -201 | 1,015 2,376 | 1,847 4,300 | $\begin{aligned} & 3,568 \\ & 6,823 \end{aligned}$ |  |
| 29 | Motor vehicles, trailers and semi-trailers | 944 | 2,797 | - | - | 1,498 | -151 | 285 | 4,429 | 5,373 | Oncistont |
| $\begin{aligned} & 30 \\ & 33 \end{aligned}$ | Other transport equipment Repair/installation of machinery \& equipment | 3,410 817 | 43 43 | - | - | 6,576 3 | 192 16 | 93 | 6,904 62 | $\begin{array}{r} 10,314 \\ 880 \end{array}$ | Stent |
| 35 | Electricity and gas supply | 4,388 | 2,321 |  | 179 | 5 | 136 | 7 | 2,648 | 7,036 |  |
| [ 36 | Water collection, treatment and supply | $\begin{aligned} & 113 \\ & 717 \end{aligned}$ | 309 432 |  | 159 319 | $\bar{j}^{-}$ | 96 |  | 468 851 85 | 581 1,567 | Mn |
| 41-43 | Construction and construction works | 2,669 | 532 |  | - | 9,398 |  |  | 9,930 | 12,599 | XOOTES Te |
| 45 46 | Wholesale \& retail trade/repair of vehicles Wholesale trade | 1,234 11,646 | 323 319 |  | - | 589 |  | 10,991 | 323 11,899 | 1,556 $\mathbf{2 3 , 5 4 5}$ |  |
| 47 | Retail trade | 208 | 88 | - | - | 7 |  |  | 95 | 303 |  |
| 49 50 | Land transport services | 1,653 | 2,027 | - | 246 | o |  | 271 | 2,544 | 4,197 | E101 2450 |
| 50 51 | Water transport services Air transport services | $\begin{array}{r} 226 \\ 1,495 \end{array}$ | 104 1,404 | - | - | - |  | $\begin{array}{r} 311 \\ 4,023 \end{array}$ | $\begin{array}{r} 415 \\ 5,426 \end{array}$ | $\begin{array}{r} 641 \\ 6,921 \end{array}$ | - |
| 52 | Warehousing | 1,888 | 222 |  | - | 1 |  |  | 223 | 2,110 |  |
| 53 5 | Postal and courier services $\begin{aligned} & \text { Pever } \\ & \text { Accommodation and food \& beverage services }\end{aligned}$ | $\begin{aligned} & 789 \\ & 882 \end{aligned}$ | 374 8,103 | - | - | o |  | $\begin{array}{r} 640 \\ 1,922 \end{array}$ | $\begin{gathered} 1,013 \\ 10,025 \end{gathered}$ | $\begin{array}{r} 1,802 \\ 10,907 \end{array}$ | diuctm |
| 58-60 | Publishing, film and broadcasting services | 3,008 1882 | 1,111 | - | 182 | 2,152 |  | 12,171 | 15,617 | 18,625 | aOUSEMEntT |
| 61 | Telecommunications services | 1,882 | 2,356 |  | 81 | 13 |  | 538 563 | 2,989 | 4,871 47548 4 |  |
| $62-63$ 64 | Computer consultancy; data processing Financial intermediation services | 13,590 13,474 | 260 1,424 |  | - | 2,135 27 |  | 31,563 7,889 | $\begin{array}{r}33,958 \\ 9,340 \\ \hline\end{array}$ | 47,548 22,814 |  |
| 65 66 66 |  | 8,364 | 1,235 | - | 299 | 7 |  | 8,195 | 9,736 | 18,100 | $0 f=260$ |
| 66 68 | Other financial activities Real estate services | 4,031 3,089 | 478 13,144 |  | 821 | - ${ }^{6}$ |  | 678 | 1,161 14,123 | 5,192 17,212 |  |
| 69-70 | Legal and accounting services; mgt consultancy | 10,611 | 211 |  |  | 849 |  | 346 | 1,406 | 12,018 |  |
| 71 72 | Architectural and engineering services Scientific research and development services | 1,164 6,767 | 12 | - | 150 | 312 395 |  | 328 1,147 | 653 1,692 | 1,817 <br> 8,458 | 0410 |
| 73 | Advertising and market research services | 5,352 | 35 |  | 150 | 395 |  | $\begin{array}{r}1,148 \\ 150 \\ \hline\end{array}$ | 1,692 <br> 190 | 8,541 | 91.03 @ |
| 74-75 | Other professional, scientific services | 8,408 | 156 |  | - | 311 |  | 3,797 | 4,265 | 12,672 |  |
| 77 78 | Rental and leasing services Employment services | 46,142 1,223 | 999 17 |  | - | ${ }_{0}^{\circ}$ |  | 12,631 | 13,630 17 | $\begin{array}{r} 59,772 \\ 1,240 \end{array}$ |  |
| 79 | Travel and tourism service activities | 171 | 384 |  | - |  |  |  | 384 | 555 | folndinthefing USOS |
| $80-82$ 84 | Security, office \& business support services Public administration | 2,958 810 | 37 | - | - | 64 |  | 41 | 101 | 3,059 | OUACAEAEAES |
| 84 85 | ( ${ }^{\text {Public administration }}$ Education services | 810 1,802 | 2,609 2, | - | 5,845 | 115 548 |  | 41 | 10,076 8,833 | 10,886 |  |
| $86-88$ $90-92$ | Human health and social work services | 1,162 | 2,537 | 1,173 | 10,656 | 31 |  | 256 | 14,653 | 15,814 |  |
| $90-92$ 93 | Cultural, arts and gambling activities Recreation and sports activities | $\begin{aligned} & 427 \\ & 691 \end{aligned}$ | 1,057 457 | - | - | 163 |  | $\begin{aligned} & 405 \\ & 115 \end{aligned}$ | $\begin{array}{r} 1,626 \\ 573 \end{array}$ | $\begin{aligned} & 2,053 \\ & 1,264 \end{aligned}$ | attheriontotthe |
| 94 | Membership organisation services | 454 | 831 | 541 | - |  |  |  | 1,372 | 1,826 |  |
| 95 96 | Repair of consumer goods | $\begin{array}{r}93 \\ 489 \\ \hline\end{array}$ | 27 873 | - | - | 0 |  |  | $\begin{array}{r}27 \\ 874 \\ \hline\end{array}$ | 120 1,363 |  |
| 97 | Private households with employed persons |  | 142 | - | - |  |  |  | 142 | 142 | $20 \rightarrow 20$ |
|  | Total intermediate consumption | $\begin{array}{r}229,437 \\ \hline 71646 \\ \hline\end{array}$ | 78,115 | 1,826 | 30,593 | 32,867 | 2,94 | 191,345 | 337,686 <br> -162 | 567,122 | able acail |
|  | Compensation of Employees Operating surplus, net | 71,646 63,942 |  |  |  | $\underset{\text { Exports ( }}{\substack{\text { cifle }}}$ |  |  |  | 566,660 |  |
|  | Consumption of fixed capital Net taxes (taxes less subsidies) on production | $\begin{array}{r} 28,422 \\ 252 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |
|  | Gross value added at basic prices | 164,293 |  |  |  |  |  |  |  |  |  |
|  | Output at basic prices ( = last row of Table 1) | 393,729 |  |  |  |  |  |  |  |  | 44 |

This Exports of goods and services figure of €191,183 million from Table 5 of the NIE is consistent with the Exports figure of €191,345 million + adjustment for cif/fob of - $€ 162$ million = €191,183 million found in the final uses at the right of the Use Table again provided by product type.

## NIE2015 Table 5 (published July 2016)



2013 Supply Table - Table 1 (published 2016)





## Supply \& Use Tables and Input-Output Tables

## Contents

Introduction

1. Overview of Tables \& their structure
2. Consistency with N.I.E. explained through the 3 methods of calculating GVA/GDP
3. More detail on Supply table \& Use table
4. Intermediate tables

## Supply \& Use Tables and Input-Output Tables

## Table 1 Supply table

- What do we mean by supply?
- Is there a pattern in the domestic supply matrix?
- What is secondary production?
- Why is this of interest?
- Basic prices versus purchasers' prices?
- Is all calculation of output the same?


## Supply \& Use Tables and Input-Output Tables

## Table 1 Supply table

- What do we mean by supply? Industry output not turnover otherwise double counting
- Is there a pattern in the domestic supply matrix? Yes, primary ‘diagonal' \& secondary production
- What is secondary production? 'Off-diagonal'
- Why is this of interest? Changing nature of industry, specialisation/diversification, efficiency, market share
- Basic prices versus purchasers' prices? Factory gate to front door
- Is all calculation of output the same? Market and nonmarket output, also output for own use


## Supply \& Use Tables and Input-Output Tables

## Table 2 Use table

- What do we mean by use?
- Explain the different elements in the table?
- What is intermediate demand?
- What are the primary inputs?
- What is final demand?
- Calculation of final Government consumption expenditure?


## Supply \& Use Tables and Input-Output Tables

## Table 2 Use table

- What do we mean by use? Modern economy has four basic activities: Produce (Supply), consume (Use), accumulate (Use), trade (Supply \& Use)
- Explain the different elements in the table? Inter-industry use, final use, primary inputs
- What is intermediate demand? Goods and services used by an industry to produce its own output
- What are the primary inputs? COE+GOS(=NOS+CFC)+Taxes less subsidies on production=GVA=Output - inter. conspt.
- What is final demand? PCE (FCE+NPISH)+GFCF+Exports
- Calculation of final Government consumption expenditure? Government as final consumer of own non-market output


## Supply \& Use Tables and Input-Output Tables

## General Supply \& Use Table issues

- Consistency with the National Accounts?
- GVA/GDP using the Income, Production and Expenditure approach
- Data sources?
- Balancing the Supply table with Use table?
-S\&UT at constant prices?


## Supply \& Use Tables and Input-Output Tables

## General Supply \& Use Table issues

- Consistency with the National Accounts? Yes, as we have seen, with the latest NIE
- GVA/GDP using the Income, Production and Expenditure approach Yes, all three, as we have seen
- Data sources? CIP for NACE 5-39, ASI for NACE 45-96 (with significant exceptions), BoP, PCE, Capform, Profits, etc.
- Balancing the Supply table with Use table? Industry balance: column totals of the outputs = inputs by industry. Product balance: row sums from Supply table equal Use so total demand for products equals total supply.
- S\&UT at constant prices? Volume changes - analysis


## Supply \& Use Tables and Input-Output Tables

## Contents

Introduction

1. Overview of Tables $\&$ their structure
2. Consistency with N.I.E. explained through the 3 methods of calculating GVA/GDP
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## Supply \& Use Tables and Input-Output Tables

## Tables 3-7 Intermediate tables

- These tables, along with the related Input-Output and multiplier tables, are produced every 5 years
- The 2011 Tables 3-7 are the so-called 'intermediate' tables. They are calculated using the Supply table and the Use table. In turn they are used to create the three Input-Output tables. The flow can be simplified as follows:
- Balanced Supply \& Use tables $\rightarrow$ Use tables at basic prices $\rightarrow$ Domestic \& Imported Use tables $\rightarrow$ Symmetric Input-Output tables $\rightarrow$ Coefficient table $\rightarrow$ Leontief table


## Supply \& Use Tables and Input-Output Tables

## Tables 3-7 Intermediate tables

- Calculation of intermediate tables - run through
- Use Table at basic prices (Table 3)
- Use Table for domestic inputs at basic prices (Table 4)
- Use Table for imports at basic prices (Table 5)
- Use Table for trade margins (Table 6)
- Use Table for taxes less subsidies on products (Table 7)
- Repetition in S\&U, intermediate and I/O tables


## Supply \& Use Tables and Input-Output Tables

## Contents - continued

5. Input-Output tables
6. Multipliers - Coefficient \& Leontief tables
7. Repetition across the different tables
8. Previous year prices - real changes

## Supply \& Use Tables and Input-Output Tables

## Tables 8-10 Input-Output tables

- Balanced Supply \& Use tables $\rightarrow$ Use tables at basic prices $\rightarrow$ Domestic \& Imported Use tables $\rightarrow$ Symmetric Input-Output tables $\rightarrow$ Coefficient table $\rightarrow$ Leontief table
- Required by legislation every five years
- Three types of Input-Output table
- Total, domestic and imports tables
- Basic prices
- Product by product structure (unlike S\&UT where industry by product)


## Supply \& Use Tables and Input-Output Tables

## Tables 8-10 Input-Output tables

- Assumptions - product technology assumption
- What are symmetric tables? Sum of entries in any row = sum of entries in corresponding column
- Calculation of Input-Output tables - run through

$$
\text { X_p = U*S^-1*q for Table } 9 \text { (domestic I/O): }
$$

$\mathrm{U}=$ Use table at basic prices (imports/taxes in separate rows)
$\mathrm{S}=$ Supply table (rows equal to vector $q$ )
$Q=n x n$ matrix with row totals of $S$ on the diagonal
X_p = product- by-product Input-Output table

## Supply \& Use Tables and Input-Output Tables

## Contents - continued

5. Input-Output tables
6. Multipliers - Coefficient \& Leontief tables
7. Repetition across the different tables
8. Previous year prices - real changes

## Supply \& Use Tables and Input-Output Tables

## Tables 11 \& 12 - Coefficients \& Leontief

- How are the Leontief multipliers calculated?
$\mathrm{L}=(\mathrm{I}-\mathrm{A})^{-1} \quad$ Where:
- L = Leontief inverse matrix
- I = Identity matrix
- $A=$ Direct requirements matrix - each cell of the $I^{*} \mid$ matrix divided by its column total
- Coefficient table (based in turn on domestic InputOutput table) is basis of Leontief table calculation
- Are there other types of multipliers? Yes, many types.


## Supply \& Use Tables and Input-Output Tables

## Tables 11 \& 12 - Coefficients \& Leontief

 - What do these output multipliers tell us? Upper portion of 2011 Table 12, using products of agriculture, forestry and fishing, estimates that each $€ 1$ of final demand for domestic output of products of agriculture, forestry and fishing requires:- $€ 1.194$ output of domestically produced agriculture, forestry and fishing;
- $€ 0.008$ output of domestically produced mining and quarrying products;
- €0.021 output of domestically produced food, beverage and tobacco products; etc. Note: These are gross figưres


## Supply \& Use Tables and Input-Output Tables

## Tables 11 \& 12 - Coefficients \& Leontief

- The lower portion of 2011 Table 12, shows the direct plus indirect effect on other inputs per $€ 1$ final demand. In each column the sum of the coefficients of imports, taxes less subsidies, compensation of employees, consumption of fixed capital and net operating surplus add to 1 .
- They show, after all the cycles of production are completed, how the additional unit of final demand was spread over these categories. There is no duplication in these coefficients.


## Supply \& Use Tables and Input-Output Tables

## Tables 11 \& 12 - Coefficients \& Leontief

- Are there other types of multipliers?
- Yes. Multipliers above are Type I multipliers measuring the direct and indirect effects.
- There are also Type II multipliers. What is the difference between the two types? As a result of the direct and indirect effects the level of household income throughout the economy will increase as a result of increased employment, etc.
- A proportion of this increased income will be re-spent on final goods and services (positive feedback effect). Type II multipliers also include these induced effects of the additional demand.


## Supply \& Use Tables and Input-Output Tables

## Contents - continued

## 5. Input-Output tables

6. Multipliers - Coefficient \& Leontief tables
7. Repetition across the different tables
8. Previous year prices - real changes

## Supply \& Use Tables and Input-Output Tables

## Repetition across the different Tables

- The same elements are repeated throughout the Supply \& Use, Intermediate and Input-Output Tables.
- Consequently the same figures keep appearing through the tables.
- Let's look at repetition for NACE 1-3 products across the 2011 tables (as 2011 is the latest Input-Output Table).


## Supply Table - Table 1

Table 12011 Supply Table at basic prices €m

|  | Industries |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \stackrel{U}{\tilde{W}} \\ & \stackrel{0}{E} \\ & \stackrel{0}{0} \\ & \frac{0}{T N} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  |  |  |  |  |
| $\begin{gathered} \text { NACE } \\ 1-3 \\ 5-9 \\ 10-12 \end{gathered}$ | Products <br> Agriculture, forestry and fishing <br> Mining, quarrying and extraction <br> Food \& beverages and tobacco products | $\begin{array}{r} 7,277 \\ 983 \\ 20,120 \end{array}$ | $\begin{array}{r} 838 \\ 6,579 \\ 6,353 \end{array}$ | 956 508 7,805 | 74 77 2,850 | -32 - -73 |  |

$\begin{array}{lll}\text { Domestic supply of } & \text { Imports of NACE } & \text { Total supply of NACE 1- } \\ \text { NACE 1-3 product } & 1-3 \text { product } & 3 \text { product at purchasers } \\ € 7.277 \text { billion } & € 0.838 \text { billion } & \text { prices is } € 9.112 \text { billion } \\ \text { estic Supply of NACE } \mathbf{1 - 3} \text { product at }\end{array}$
So the 2011 domestic supply of NACE 1-3 product at basic prices $=€ 7.277$ billion + Imports $€ 0.838$ billion = €8.115 billion + trade margins $€ 0.956$ billion + net taxes $€ 41$ million = Total supply $€ 9.112$ billion

## Use Table at purchasers' prices - Table 2

Table 22011 Use Table at purchasers' prices €m

|  | Industries |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{I}{N} \\ & \frac{1}{2} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  | - |
| 1-3 | Agriculture, forestry and fishing | 5,888 | 2,049 | - | - | 21 | 26 | 1,128 | 3,224 | 9,112 |
| 5-9 | Mining, quarrying and extraction | 4,199 | 298 | - | 20 | 274 | -143 | 499 | 948 | 5,141 |
| 10-12 | Food \& beverages and tobacco products | 7,198 | 10,455 | 106 | 1 | 133 | -96 | 19,257 | 29,857 | 37,055 |

# Total use of NACE 1-3 product at purchasers' prices is $€ 9.112$ billion - the same figure we had in the Supply table - i.e. total use of the product $=$ total supply of the product 

## Use Table at basic prices - Table 3

Table $\mathbf{3} 2011$ Use table at basic prices $€ m$

| Industries |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{\mathrm{I}}{\mathrm{~N}} \\ & \frac{\mathrm{Z}}{2} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  | $\square$ |
| 1-3 | Agriculture, forestry and fishing | 5,374 | 1,750 | - | - | 20 | -131 | 1,102 | 2,741 | 8,115 |
| 5-9 | Mining, quarrying and extraction | 3,900 | 244 | - | 19 | 236 | -334 | 496 | 662 | 582 |
| 10-12 | Food \& beverages and tobacco products | 5,700 | 2,261 | 85 | 1 | 108 | -344 | 18,662 | 20,773 | 26,473 |

## Total use of NACE 1-3 product at basic prices is $€ 8.115$ billion - the same figure we had in the Supply table - i.e. total domestic supply + total imports of the product

## Use Table for domestic supply at basic prices - Table 4

Table 42011 Use table for domestic inputs at basic prices

| Industries |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{\mathrm{I}}{\mathrm{~N}} \\ & \frac{0}{2} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  | - |
| 1-3 | Agriculture, forestry and fishing | 4,731 | 1,526 | - | - | 17 | -100 | 1,102 | 2,546 | 7,277 |
| 5-9 | Mining, quarrying and extraction | 565 | 4 | - | 0 | 101 | -183 | 496 | 418 | 98 |
| 10-12 | Food \& beverages and tobacco products | 762 | 710 | 9 | 0 | 16 | -39 | 18,662 | 19,358 | 20,120 |

## Total use of domestic supply of NACE 1-3 product at basic prices is $€ 7.277$ billion - the same figure we had in the Supply table - i.e. total domestic supply

## Use Table for imports at basic prices - Table 5

Table 52011 Use table for imports at basic prices $€ m$


## Use Table for trade margins - Table 6

Table 62011 Use table for Trade margins $€ m$

|  | Industries |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{\mathrm{I}}{3} \\ & \frac{1}{2} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  |  |
| 1-3 | Agriculture, forestry and fishing | 505 | 267 | - | - | 2 | 156 | 26 | 451 | 956 |
| 5-9 | Mining, quarrying and extraction | 254 | 28 | - | 1 | 31 | 191 | 3 | 254 |  |
| 10-12 | Food \& beverages and tobacco products | 1,368 | 5,548 | 21 | 0 | 25 | 248 | 595 | 6,438 | 7,805 |

## Total trade margins of NACE 1-3 product is $€ 0.956$ billion - the same figure we had in the Supply table - i.e. trade margins column figure for NACE 1-3 product

## Use Table for taxes less subsidies on products - Table 7

Table $\mathbf{7} 2011$ Use table for Taxes less subsidies on products $€ m$


Total taxes minus subsidies on products of NACE 13 product are $€ 41$ million - the same figure we had in the Supply table - i.e. taxes on products figure of $€ 74$ million minus the subsidies on products figure of $€ 32$ million for NACE 1-3 product

## Total Input-Output

 Table - Table 8Input-Output is product*product, so Total inputs (column) = total outputs (row) in a symmetric table

Total domestic inputs = €7.277 billion (= total domestic supply in table 1) Imports = €0.838 billion (= imports in Table 1)
Total inputs at basic prices = €8.115 billion (= total domestic supply + imports in table 1) for NACE 1-3 product


## Total Input-Output Table - Table 8

Table 82011 Symmetric Input-Output Table of total product
flows at basic prices $€ \mathrm{~m}$

|  | Products |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{\mathrm{I}}{\mathrm{~N}} \\ & \frac{1}{\mathrm{Z}} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  | - |
| 1-3 | Agriculture, forestry and fishing | 5,374 | 1,750 | - | - | 20 | -131 | 1,102 | 2,741 | 8,1 |
| 5-9 | Mining, quarrying and extraction | 3,900 | 244 | - | 19 | 236 | -334 | 496 | 662 |  |
| 10-12 | Food \& beverages and tobacco products | 5,700 | 2,261 | 85 | 1 | 108 | -344 | 18,662 | 20,773 | 26,473 |

## Input-Output is product*product, so Total inputs (column) = total outputs (row) in a symmetric table

## Total inputs = €7.277 billion + €0.838 billion (=

 €8.115 billion (= total domestic supply + imports in Table 1) = Total outputs for NACE 1-3 product
## Total Domestic InputOutput Table - Table 9

Input-Output is product*product, so Total inputs (column)<br>= total outputs (row) in a symmetric table

Total domestic inputs<br>= €7.277 billion (= total domestic supply in Table 1)



## Total Domestic Input-Output Table - Table 9

Table 92011 Symmetric Input-Output Table of domestic
product flows at basic prices $€$ m

|  | Products |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \frac{\mathrm{I}}{\mathrm{~S}} \\ & \frac{0}{2} \end{aligned}$ |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  |  |
| 1-3 | Agriculture, forestry and fishing | 4,731 | 1,526 | - | - | 17 | -100 | 1,102 | 2,546 | 7,277 |
| 5-9 | Mining, quarrying and extraction | 565 | 4 | - | 0 | 101 | -183 | 496 | 418 | 985 |
| 10-12 | Food \& beverages and tobacco products | 762 | 710 | 9 | 0 | 16 | -39 | 18,662 | 19,358 | 20,120 |

Input-Output is product*product, so Total inputs (column) = total outputs (row) in a symmetric table
Total domestic inputs = €7.277 billion (= total domestic supply in Table 1) for NACE 1-3 product

## Total Imported InputOutput Table - Table 10

Input-Output is product*product, so Total inputs (column) = total outputs (row) in a symmetric table

Total imported inputs = $€ 2.653$ billion (= imported inputs in Table 9)

Table 102011 Input-Output Table of imported product

|  | Products | 1-3 |
| :---: | :---: | :---: |
|  |  |  |
| NACE | Products |  |
| 1-3 | Agriculture, forestry and fishing | 12 |
| 5-9 | Mining, quarrying and extraction | 4 |
| 10-12 | Food \& beverages and tobacco products | 1,199 |
| 13-15 | Textiles, wearing apparel and leather products | 13 |
| 16 | Wood and wood products (excl furniture) | 2 |
| 17 | Pulp, paper and paper products | 22 |
| 18 | Printed matter and recorded media | 0 |
| 19,31,32 | Petroleum; furniture; other manufacturing | 321 |
| 20 | Chemicals and chemical products | 406 |
| 21 | Basic pharmaceutical products | 132 |
| 22 | Rubber and plastics | 23 |
| 23 | Other non-metallic mineral products | 2 |
| 24 | Basic metals | 12 |
| 25 | Fabricated metal products | 11 |
| 26 | Computer, electronic \& optical products | 4 |
| 27 | Electrical equipment | 6 |
| 28 | Machinery and equipment n.e.c. | 5 |
| 29 | Motor vehicles, trailers and semi-trailers | 6 |
| 30 | Other transport equipment | 8 |
| 33 | Repair/installation of machinery \& equipment | - |
| 35 | Electricity and gas supply | - |
| 36 | Water collection, treatment and supply | - |
| 37-39 | Sewerage, refuse and remediation services | - |
| 41-43 | Construction and construction works | - |
| 45 | Motor fuel and vehicle trade and repair | - |
| 46 | Wholesale trade | 355 |
| 47 | Retail trade | - |
| 49 | Land transport services | 0 |
| 50 | Water transport services | 1 |
| 51 | Air transport services | 1 |
| 52 | Warehousing | - |
| 53 | Postal and courierservices | 1 |
| 55-56 | Accommodation and food \& beverage services | 1 |
| 58-60 | Publishing, film and broadcasting services | - |
| 61 | Telecommunications services | 4 |
| 62-63 | Computer consultancy; data processing | 0 |
| 64 | Financial intermediation services | 15 |
| 65 | Insurance, reinsurance and pension funding | 46 |
| 66 | Other financial activities | 0 |
| 68 | Real estate services | - |
| 69-70 | Legal and accounting services; mgt consultancy | 1 |
| 71 | Architectural and engineering services | 0 |
| 72 | Scientific research and development services | 25 |
| 73 | Advertising and market research services | 5 |
| 74-75 | Other professional, scientific services | 1 |
| 77 | Rental and leasing services | 9 |
| 78 | Employment services | - |
| 79 | Travel and tourism service activities | - |
| $\begin{gathered} 80-82 \\ 84 \end{gathered}$ | Security, office \& business support services Publicadministration | - |
| 85 | Education services | - |
| 86-88 | Human health and social work services | - |
| 90-92 | Cultural and sporting services | 1 |
| 93 | Recreation services | 0 |
| 94 | Membership organisation services |  |
| 95 | Repair of consumer goods |  |
| 96 | Otherservices |  |
| 97 | Private households with employed persons |  |
|  | Total | 2,657 |

## Supply \& Use Tables and Input-Output Tables

## Contents - continued

## 5. Input-Output tables

6. Multipliers - Coefficient \& Leontief tables
7. Repetition across the different tables
8. Previous year prices - real changes

## Exploratory Supply \& Use Tables at previous year prices

## (A framework for measuring economic growth)

Exploratory Supply \& Use Tables at previous year prices

## Structure of PYP part of presentation

1. Background
2. Data requirements
3. Deflation of products \& industries
4. Volume changes
5. Comparison with relevant NIE
6. Future developments


## Exploratory Supply \& Use Tables at previous year prices

## 1. Background

Link between Supply \& Use Tables at current \& constant prices


## Exploratory Supply \& Use Tables at previous year prices Nominal growth



Year: 2015 Prices: 2015

## Exploratory Supply \& Use Tables at previous year prices Nominal growth



## Exploratory Supply \& Use Tables at previous year prices

## Real growth and Price growth



## Exploratory Supply \& Use Tables at previous year prices

## Real growth and Price growth



## Exploratory Supply \& Use Tables at previous year prices

## Real growth and Price growth



Exploratory Supply \& Use Tables at previous year prices

## Background continued

- We have seen S\&UT provide a framework to compare different methods of compiling GDP estimates
- S\&UT in PYP also for the same reason
- Contains different estimates of GDP in PYP or GDP volume changes at a more detailed level
- Allows for detailed analysis of price effects on GVA
- Carried out experimentally at detailed level for 2006 \& 2007 (NACE 1.1) + 2008, 2009, 2012 \& 2013 (NACE Rev. 2)
- ESA 2010 requirement from 2018 for 2015 data
- Sequential vs. Simultaneous compilation approach
- Row by Row versus Column by Column approach

Exploratory Supply \& Use Tables at previous year prices

## 2. Data requirements

- S\&UT in current prices
- Price indices or deflators to convert cells to PYP
- Supply table
- Better availability of deflators than in the Use table
- PPI from WPI for most Manufacturing NACE codes
- SPPI for some Service NACE codes
- Trade Imports; 2-digit NACE unit value indices
- Services Imports; often as for home produced
- Trade margins: two-stage deflation
- ‘Margin' deflation: deflated at 3-digit NACE level using ASI
- 'Product' deflation: using RSI \& WPI
- Product taxes and subsidies using deflated NA values


## Exploratory Supply \& Use Tables at previous year prices

## Data requirements continued

- Use table
- Greater difficulties than the Supply table
- At purchasers' prices (+ wholesale \& retail margin)
- No price index for raw materials for industry
- Intermediate consumption can be home or import
- Weighted average of WPI PPI 'home' \& import unit value indices by 2-digit NACE
- Special run from WPI for total/home/export sales price indices by detailed NACE code
- Uses of services by industry; SPPI
- Households \& NPISH; CPI detailed sub-indices
- Govt. expenditure; weighted average of salary \& other costs
- GFCF \& Inventories; similar to National Accounts estimates
- Exports; production industries PPI for export sales while for other sectors used SPPI, CPI indices, earnings indices, etc.


## Exploratory Supply \& Use Tables at previous year prices

3. Deflation of products \& industries

- Description of deflators used \& source
- Each element is deflated separately. Let's look at a fairly straightforward example of the deflation of a row or product, NACE Rev. 223 (Other nonmetallic mineral products) in 2013.

|  | Industries | 1-3 | 5-9 | 10-12 | 13-15 | 16 | 17 | 18 | 19,31,32 | 20 | 21 | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  |  |  |  |
| 1-3 | Agriculture, forestry and fishing | 8,552 | - | 17 | 0 | - | - | - | - | - | - | - |
| 5-9 | Mining, quarrying and extraction | - | 964 | - | - | - | - | - | 0 | 76 | - | - |
| 10-12 | Food \& beverages and tobacco products | 6 | 8 | 20,668 | 5 | - | 0 | - | - | 11 | - | - |
| 13-15 | Textiles, wearing apparel and leather products | - | - | - | 373 | - | 1 | 0 | 31 | - | - | 10 |
| 16 | Wood and wood products (excl furniture) | 5 | - | - | - | 703 | 2 | 0 | 7 | - | - | 2 |
| 17 | Pulp, paper and paper products | - | - | - | 1 | 8 | 339 | 18 | 20 | 0 | - | 6 |
| 18 | Printed matter and recorded media | - | - | - | - | - | 20 | 1,011 | 3 | 1 | - | 13 |
| 19,31,32 | Petroleum; furniture; other manufacturing | - | 12 | - | 1 | 1 | 0 | - | 10,106 | 1 | 7 | 2 |
| 20 | Chemicals and chemical products | - | 17 | 1,939 | 12 | 1 | 4 | - | 346 | 6,160 | 5,229 | 11 |
| 21 | Basic pharmaceutical products |  |  | 69 |  |  |  |  | 646 | 4,907 | 25,417 | - |
| 22 | Rutiover and plastics | - | - | - | 1 | 4 | 9 | 0 | 170 | 6 |  |  |
| 23 | Other non-metallic mineral products | - | 51 | - | 0 | 3 | - | - | 0 | 4 | - |  |
| 24 | Basictreteds | - | - | - | 2 | - | - | 0 |  |  | - | 3 |
| 25 | Fabricated metal products | - | - | - | 0 | 0 | 0 | 2 | 165 | 0 | - | 12 |
| 26 | Computer, electronic \& optical products | - | - | - | - | - | - | - | 38 | - | 8 | 1 |

## Table 1

2013 Supply Table at basic prices €m

|  | Industries |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |
| 1-3 | Agriculture, forestry and fishing | 8,569 | 1,199 | 1,469 | 85 | -9 | 11,313 |
| 5-9 | Mining, quarrying and extraction | 1,161 | 4,644 | 503 | 101 | - | 6,409 |
| 10-12 | Food \& beverages and tobacco products | 20,998 | 7,840 | 7,890 | 3,018 | -59 | 39,687 |
| 13-15 | Textiles, wearing apparel and leather products | 415 | 2,794 | 1,953 | 574 | - | 5,736 |
| 16 | Wood and wood products (excl furniture) | 726 | 336 | 246 | 21 | - | 1,329 |
| 17 | Pulp, paper and paper products | 391 | 1,112 | 93 | 133 | - | 1,729 |
| 18 | Printed matter and recorded media | 1,050 | 206 | 685 | 47 | - | 1,988 |
| 19,31,32 | Petroleum; furniture; other manufacturing | 10,147 | 6,854 | 2,954 | 3,737 | -5 | 23,686 |
| $20$ | Chemicals and chemical products | 13,802 | 6,598 | 324 | 212 | - | 20,936 |
| 21 | Basic pharmaceutical products | 31,038 | 6,178 | 4,030 | 457 | - | 41,703 |
| 22 | Rubber arraplastics | 1,485 | 1,728 | 337 | 136 |  | 3,685 |
| 23 | Other non-metallic mineral products | 1,116 | 506 | 196 | 49 | - | 1,869 |
| 24 | Dacir metals | 731 | 1,380 | 587 | 1 |  | 2,699 |
| 25 26 | Fabricated metal products | 1,825 | 1,023 | 685 | 114 | - | 3,647 |
| 26 | Computer, electronic \& optical products | 9,297 | 6,541 | 333 |  | - | 16,386 |

Exploratory Supply \& Use Tables at previous year prices
2013 Deflation of NACE 23 product - Supply Table

|  | 2013 <br> Current price (€m) | Deflator \& source | $\begin{aligned} & 2013 \\ & \text { PYP } \\ & (€ m) \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Domestic supply | 1,116 | 1.009 (WPI Table 2 PPI for NACE 23) | 1,106 |
| Imports | 506 | 1.044 (Laspeyres 2-digit NACE 23 Import deflator based on Trade data) | 485 |
| Trade margins | 196 | 1.000 (Double round of deflations undertaken - initially to deflate the margin itself and secondly to deflate the underlying products on which this margin was based. Margins were deflated using data from the Annual Services Inquiry (ASI). The deflator was taken to be the product of the ratios (gross margin as a \% of purchases in year $t$ divided by gross margin as a \% of purchases in year $t-1$ )* ${ }^{(p r i c e}$ in year $t / p$ price in year $t$ - <br> 1). Secondary product deflation using CPI and WPI data.) | 196 |
| Taxes on products | 49 | 0.995 (Product taxes split into 4: VAT; Customs on imports; Excise on imports; Other product taxes. Each element deflated separately.) | 50 |
| Subsidies on products | - | No product subsidies for NACE 23 | - |
| Total Supply | 1,869 | Overall implied Supply table NACE23 deflator $=1.017$ | 1,837 |

## Table 2

2013 Use Table at purchasers' prices $€ \mathrm{~m}$

|  | Industries | 1-3 | 5-9 | 10-12 | 13-15 | 16 | 17 | 18 | 19,31,32 | 20 | 21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| NACE | Products |  |  |  |  |  |  |  |  |  |  |
| 1-3 | Agriculture, forestry and fishing | 2,351 | 0 | 4,619 | 1 | 183 | 0 | 0 | 1 | 22 | 16 |
| 5-9 | Mining, quarrying and extraction | 68 | 105 | 89 | 1 | 1 | 1 | 2 | 2,238 | 79 | 63 |
| 10-12 | Food \& beverages and tobacco products | 1,769 | 0 | 5,056 | 0 | 0 | 1 | 0 | 0 | 145 | 109 |
| 13-15 | Textiles, wearing apparel and leather products | 19 | 0 | 0 | 130 | 1 | 1 | 4 | 55 | 13 | 10 |
| 16 | Wood and wood products (excl furniture) | 3 | 0 | 24 | 0 | 133 | 1 | 1 | 339 | 4 | 3 |
| 17 | Pulp, paper and paper products | 12 | 0 | 229 | 6 | 6 | 117 | 31 | 67 | 39 | 9 |
| 18 | Printed matter and recorded media | 2 | 0 | 6 | 0 | 0 | 3 | 238 | 3 | 29 | 22 |
| 19,31,32 | Petroleum; furniture; other manufacturing | 386 | 28 | 257 | 5 | 11 | 5 | 7 | 796 | 109 | 54 |
| 20 | Chemicals and chemical products | 554 | 11 | 291 | 31 | 40 | 20 | 64 | 57 | 3,565 | 131 |
| 21 | Basic pharmaceutical products | 182 | 0 |  |  |  | - | - | - | - | 4,297 |
| 22 | nupber and plastics | 24 | 1 | 355 | 1 | 1 | 3 | 1 | 83 | 58 | 188 |
| 23 | Other non-metallic mineral products | 12 | 12 | 44 | 0 | 0 | 0 | 2 | 201 | 17 | 12 |
| 24 | Basic metais | 17 | 1 | 116 | 1 | 12 | 1 | 2 | 207 | 49 | 37 |
| 25 | Fabricated metal products | 18 | 6 | 117 | 2 | 10 | 2 | 4 | 258 | 75 | 57 |
| 26 | Computer, electronic \& optical products | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 204 | 15 | 11 |

Table 2
$\mathbf{2 0 1 3}$ Use Table at purchasers' prices €m

|  | Industries |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\frac{\text { 플 }}{\frac{M}{2}}$ |  |  |  |  |  |  | Deflating |
| NACE | Products |  |  |  |  |  |  |  |  |  | se table |
| 1-3 | Agriculture, forestry and fishing | 7,307 | 2,135 | - | - | -19 | 107 | 1,784 | 4,006 | 11,313 |  |
| 5-9 | Mining, quarrying and extraction | 4,915 | 345 | - | 22 | 213 | 392 | 520 | 1,494 | 6,409 | rows |
| 10-12 | Food \& beverages and tobacco products | 8,661 | 10,430 | 111 | 1 | 53 | 311 | 20,119 | 31,026 | 39,687 |  |
| 13-15 | Textiles, wearing apparel and leather products | 955 | 3,798 | - | - | 43 | 549 | 391 | 4,781 | 5,736 |  |
| 16 | Wood and wood products (excl furniture) | 953 | 101 | - | - | 10 | -139 | 404 | 376 | 1,329 |  |
| 17 | Pulp, paper and paper products | 1,119 | 347 | - | - | 3 | 7 | 252 | 609 | 1,729 |  |
| 18 | Printed matter and recorded media | 1,026 | 280 | - | - | 30 | 152 | 500 | 963 | 1,988 |  |
| 19,31,32 | Petroleum; furniture; other manufacturing | 8,086 | 6,230 | - | 22 | 908 | 61 | 8,379 | 15,600 | 23,686 |  |
| 20 | Chemicals and chemical products | 6,111 | 1,093 | - | - | 87 | 548 | 13,098 | 14,825 | 20,936 |  |
| 21 | Basic pharmaceutical oroducts | 5,078 | ,509 |  | 1,039 | 1,7 | 412 | 31,031 | 36,625 | 41,703 |  |
| 22 | Nubber and plastics | 2,158 | 507 | - | - | 17 | -15 | 1,019 | 1,527 | -3,685 |  |
| 23 | Other non-metallic mineral products | 1,462 | 212 | - | - | 9 | -145 | 331 | 407 | 1,860 |  |
| 24 | Basicmetat | 1,968 | 7 | - | - |  | 45 | 679 | 731 | 2,699 |  |
| 25 26 | Fabricated metal products <br> Computer, electronic \& optical products | 1,781 4,373 | 285 575 | - | - | 146 1,790 | 60 366 | 1,374 9,281 | 1,866 12,012 | 3,647 16,386 | 98 |

Exploratory Supply \& Use Tables at previous year prices 2013 Deflation of NACE 23 product - Use Table

|  | 2013 <br> Current price (€m) | Deflator \& source | $\begin{aligned} & 2013 \\ & \text { PYP } \\ & (\mathrm{Em}) \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Inter-industry use | 1,462 | 1.017 (Weighted average of WPI PPI for 'Home sales' for NACE 23 (1.007) and Import unit value for NACE $23 \text { (1.044)) }$ | 1,437 |
| PCE | 212 | 0.980 (Weighted average of relevant CPI subindices) | 216 |
| NPISH | - | No NPISH for NACE 23 | - |
| Government expenditure | - | No Government consumption expenditure for NACE 23 | - |
| GFCF | 9 | 0.998 (Weighted average of NACE 23 relevant deflators used in Capform GFCF estimates) | 9 |
| Inventories | -145 | 0.994 (Weighted average of NACE 23 relevant deflators used in Capform Inventories estimates) | -146 |
| Exports | 331 | 1.020 (WPI PPI for 'Export sales' for NACE 23) | 325 |
| Total Use | 1,869 | Overall implied Use table NACE 23 deflator = 1.015 | 1,841 |




## Deflating Use

 table columns- Similarly, each of the inputs of every individual industry sector
were deflated separately


## 4. GVA Volume changes - Double deflation

- This means that S\&UT at PYP provides a framework for 'Double deflation' to obtain GVA in PYP
- What is this? The separate deflation of outputs and inputs

Deflated GVA = Deflated Output (from Supply table) minus deflated intermediate consumption (from Use table) allows for volume changes for each industry

- More comprehensive than projecting forward 'value addeds' (changes in ratios of inputs to outputs, within inputs...)
- This is because the ratio of Output to Intermediate consumption and Output to Value added can change significantly year-on-year


## Exploratory Supply \& Use Tables at previous year prices

## 5. Comparisons with volume changes in the NIE

- We compared the 2012 PYP S\&UT published in 2015 with NIE14 published in 2015 and the 2013 PYP S\&UT published in 2016 with NIE15 published in 2016 for the following:
- GVA (Output method)
- GDP (Expenditure method)
- PCE
- Government consumption expenditure
- Gross Fixed Capital Formation
- Imports
- Exports
- Taxes on products
- Subsidies on products

Exploratory Supply \& Use Tables at previous year prices
Comparison of percentage volume changes for 2011 to 2012 based on the Supply and Use tables and the estimates already published in NIE14

| Aggregate | 2011 to 2012 \% Volume changes |  |  |
| :---: | :---: | :---: | :---: |
|  | Estimate based on Unbalanced Supply and Use table in PYP | Estimate based on Balanced ${ }^{1}$ Supply and Use table in PYP | Estimate as published in NIE14² |
| Gross Domestic Product at market prices (Expenditure method) | 0.4 | 0.2 | 0.2 |
| Gross Value Added at basic prices (Output method) | 0.5 | 0.2 | 0.3 |
| Personal consumption expenditure | -1.4 | -1.6 | -1.0 |
| Government consumption expenditure | 0.1 | -0.1 | -1.2 |
| Gross fixed capital formation | 9.1 | 8.9 | 8.8 |
| Exports of goods and services | 3.5 | 3.4 | 2.1 |
| Taxes on products | -0.2 |  | -1.4 |
| Subsidies on products | -1.4 |  | 0.9 |
| Imports of goods and services | 4.1 |  | 2.9 |

1 Balanced use to supply by product - i.e. total use matched to total supply for each 2-digit NACE code.
2 Estimates calculated using figures published in NIE 2014 Tables 5 and 6.

## Exploratory Supply \& Use Tables at previous year prices

Comparison of percentage volume changes for 2012 to 2013 based on the Supply and Use tables and the estimates already published in NIE15

| Aggregate | 2012 to 2013 \% Volume changes |  |  |
| :---: | :---: | :---: | :---: |
|  | Estimate based on Unbalanced Supply and Use table in PYP | Estimate based on Balanced ${ }^{1}$ Supply and Use table in PYP | Estimate as published in NIE15² |
| Gross Domestic Product at market prices (Expenditure method) | 1.1 | 1.1 | 1.1 |
| Gross Value Added at basic prices (Output method) | 0.9 | 0.9 | 0.8 |
| Personal consumption expenditure | -0.6 | -0.6 | -0.3 |
| Government consumption expenditure | -2.1 | -2.0 | -1.3 |
| Gross fixed capital formation | -5.6 | -5.7 | -5.5 |
| Exports of goods and services | 1.9 | 2.0 | 3.1 |
| Taxes on products | 3.8 |  | 3.7 |
| Subsidies on products | -2.0 |  | -0.6 |
| Imports of goods and services | 0.2 |  | 1.1 |

1 Balanced use to supply by product - i.e. total use matched to total supply for each 2-digit NACE code.
2 Estimates calculated using figures published in NIE 2015 Tables 5 and 6.

## Comparisons with relevant NIE continued

 - While the overall figures and 'headline' numbers are reasonably consistent with the relevant NIE, at a sectoral level there can be differences at a detailed level with the NIE- Largely, though not entirely, due to Double deflation (and royalties...)
- Further details available in the PYP publications, particularly the first set of exploratory tables for 2006 \& 2007:
http://www.cso.ie/en/media/csoie/releasespublic ations/documents/economy/2007/esut0607.pdf

6. Future developments in PYP S\&U tables?

- Constant S\&U tables simultaneously with current S\&U tables? Done for the first time for 2012 tables (Dec 15)
- Timeliness of both current \& constant S\&UT - can the present $n+3$ timeline (European standard) be improved? Advance ( $n+1$ ), preliminary ( $n+2$ ) and final estimate ( $n+3$ ) structure? Data availability?
- Publish within the $\mathrm{n}+3$ year? Done for the first time for current tables in 2014, for constant tables in 2015
- Incorporation of S\&U (current \& PYP) into revised NatAcc system?
- Implications (including resources) for NatAcc system?

