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#### Development of supply and use tables

## Application of the System of National Accounts 2008 in compiling supply and use tables for the economy of Israel

Transmitted by the Central Bureau of Statistics of Israel<sup>1</sup>

### Summary

Implementation of the recommendations of the System of National Accounts 2008 (2008 SNA) in the national accounts of Israel required changes to be made to the process of compiling supply and use tables.

This article describes the experience of compiling supply and use tables for the Israeli economy. It includes a brief description of the compilation methods and classifications used, explains the data sources and describes the process of balancing the tables.

Examples are given of adjustments made to the way that supply and use tables are compiled with the implementation of the 2008 SNA recommendations in respect of measuring the output of the central bank and the capitalization of research and development expenditure. In conclusion, the impact of these changes on the level of gross domestic product (GDP) is assessed.

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## I. Introduction

1. Input-output tables describing the Israeli economy were first developed by the central bank of Israel in 1958. Then, after a short interruption, the Central Bureau of Statistics began compiling input-output tables in 1975 and has continued to do so since then, at varying intervals.
2. Eleven input-output tables have been compiled during this period, the most recent reflecting the structure of the Israeli economy in 2006, published in 2013. The first stage in compiling input-output tables is to develop supply and use tables.
3. The importance of supply and use tables is that they allow a detailed analysis to be made of the flows of goods and services in the Israeli economy by comparing and evaluating data received from different sources. Supply and use tables present, on the one hand, the list of goods and services produced in local enterprises or imported into the country; and on the other hand, the use of goods and services on the domestic market or exported to other countries.
4. Currently, the Central Bureau of Statistics is compiling supply and use tables for 2011 on the basis of the 2006 input-output and supply and use tables. The most recent tables were constructed on the basis of the 1993 SNA recommendations, so they needed to be adjusted as a result of the transition in 2013 to compilation of the country's national accounts in accordance with the 2008 SNA recommendations.
5. This article describes the experience in compiling supply and use tables for the Israeli economy. It includes a brief description of the compilation methods and classifications used, explains the data sources used and describes the process of balancing the tables.
6. Examples are given of the adjustments made to the way the supply and use tables are compiled as a result of implementation of the 2008 SNA recommendations in respect of measuring the output of the central bank and the capitalization of research and development expenditure. In conclusion, the impact of these changes on the level of GDP is assessed.

## II. Data sources and procedure for compilation of supply and use tables

### A. Compilation of tables

7. The supply and use tables for the Israeli economy for 2011 are compiled on the basis of the 2008 SNA recommendations. They are presented in 70 groups of characteristic products at basic prices and at purchaser's prices. A characteristic product is a product whose production is characteristic of a given industry and whose name is identical to that of the corresponding industry. Classification of production by industry follows the Israeli Standard Industrial Classification of All Economic Activities 2011 (based on the International Standard Industrial Classification of All Economic Activities, Rev. 4 (ISIC 4)).
8. A supply table shows supplies of products from two sources: local production and imports. It also includes the matrix of trade and transport margins and the matrix of taxes and subsidies on products.

9. A use table shows the use of the products in intermediate consumption by industries and final use, which includes exports, gross capital formation and final consumption expenditure. Final consumption is divided into consumption of households and of non-profit institutions serving households, and consumption of the general government sector, which consists of collective and individual consumption.

## **B. Supply table**

10. The data sources and evaluation methods for the main components of a supply table can be briefly described as follows: output by industry, imports of goods and services, trade and transport margins, and taxes and subsidies.

11. Output by industry is estimated on the basis of information received from special surveys and analyses of financial statements of enterprises and administrative sources.

### **1. Agriculture**

12. Agricultural output in real terms by type of product is determined on the basis of reports of agricultural producers' associations. Output is divided into three uses: sale for consumption on the domestic market; deliveries for industrial processing; and exports. The estimated value of agricultural production is determined on the basis of data in real terms and the corresponding prices by type of product.

### **2. Manufacturing**

13. Manufacturing output (excluding diamond processing) is determined on the basis of annual surveys of manufacturing enterprises. The breakdown of production within each industry, for classification of the characteristic products of that industry, as well as the classification of the materials used in manufacture by characteristic product of the industry, is based on ratios derived from the survey of manufactured products and materials used in manufacturing for 2006.

14. In view of the special nature of its activities, the diamond processing industry is not covered in the survey of manufacturing enterprises. The output of the diamond industry is determined, on the basis of information from the Ministry of the Economy, by exports, imports and changes in inventories of polished diamonds.

### **3. Electricity and water supply**

15. The estimated output of the electricity and water industries is compiled on the basis of data from the financial reports of the companies concerned, as well as data from government administrative sources.

### **4. Construction**

16. Estimates of output in the construction industry are made on the basis of data on capital formation in residential dwellings, industrial buildings, economic infrastructure and defence construction. In addition, the estimates include the cost of major repairs to dwelling structures and industrial buildings, as well as the cost of maintenance of roads and other infrastructure. Output is estimated on the basis of a survey of the construction industry and data from administrative sources.

17. Intermediate consumption elements in the construction industry are broken down by type of characteristic product on the basis of the proportion of expenditure when calculating the relevant price indices for expenditure on dwellings, road construction, etc.

## 5. Services

18. Estimates of the output of services provided by the business sector are based on surveys of enterprises producing services, analysis of financial reports and data from administrative sources.

19. The main source of information is the annual survey of enterprises in trade, manufacturing services, transport and communications. The results determine the estimates of output and intermediate consumption by type of services. The results of other surveys are also used; these include surveys of hotels conducted jointly with the Ministry of Tourism.

20. The services provided by government agencies are estimated on the basis of an analysis of data on implementation of the State budget and additional information from the Ministry of Finance and the Ministry of Defence. Local authority services are estimated from an analysis of data from budget and financial reports.

21. The output of services provided by non-profit organizations is estimated from a survey of non-profit organizations based on the analysis of data from financial reports.

22. Banking services are estimated following an analysis of data from financial reports of commercial banks and the annual review of the banking system, published by the central bank's Banking Supervision Department. The output of the central bank is estimated on the basis of the annual report of the Bank of Israel and additional information obtained from its departments.

23. Insurance services are estimated on the basis of information from financial reports of insurance companies, and the annual report prepared by the department responsible for supervision of insurance under the Ministry of Finance.

24. The output of research and development services is estimated on the basis of the results of special surveys of private, non-profit and public enterprises. However, these surveys do not cover the activities of start-up companies. A specially developed method is used to estimate the output of start-up companies, based on an analysis of information published by venture capital funds on financing of research and development of start-up companies.

## 6. Imports

25. Imports of goods are based on data from the customs service. They also include goods that do not go through registration at customs (for example, imports by the Ministry of Defence, trade with the Palestinian Authority, etc.). Since the customs service registers goods imported at cost, insurance and freight (CIF) prices, the total value of goods imported is adjusted to free on board (FOB) prices.

26. Imported goods are classified by use (final consumption, gross fixed capital formation and intermediate consumption) on the basis of the results of a statistical survey specially conducted in 2006 on the use of imports.

27. Imports of services are determined from the balance of payments, which is drawn up on the basis of information received from the central bank. The results of a statistical survey of enterprises on the export and import of services are used to classify imported services.

## **7. Trade and transport margins**

28. The total amount of trade and transport margins is broken down by characteristic products of agriculture and industry on the basis of data from statistical surveys.

## **8. Taxes and subsidies on products**

29. Taxes and subsidies on products are broken down on the basis of data from reports by the Office of the Chief Accountant and the Ministry of Finance tax and customs department.

## **C. Use table**

30. The data sources and estimation methods for the main components of the use table include: final consumption expenditure, gross capital formation, exports and intermediate consumption of industries.

### **1. Final consumption expenditure**

#### **(a) Households**

31. The main source of estimates of final consumption expenditure of households is the annual statistical survey of households. The statistical survey data on output of agriculture, industrial production of food, goods and services, retail and wholesale trade turnover, and imports of goods and services consumed by households are also included, and information from central and local administrations is used.

#### **(b) Non-profit institutions serving households (NPISHs)**

32. Final consumption expenditure of NPISHs is estimated on the basis of payment of salaries and other running costs derived from surveys and analysis of the financial reports of these institutions.

#### **(c) Government sector**

33. Final consumption expenditure of the general government sector consists of two parts: individual consumption expenditure and collective consumption expenditure. They are estimated on the basis of an analysis of data from the Ministry of Finance report on implementation of the State budget and additional information obtained from the National Insurance Institute, the Ministries of Defence, Education and Health, and others. Data from analyses of the financial reports of local governments, national institutions and non-profit organizations are also used.

### **3. Gross capital formation**

34. Gross fixed capital formation is defined on the basis of information on imports and local industrial production of machinery, equipment and vehicles; and the volume of construction of residential and industrial buildings, estimated by the initial and final construction surface area method. Data on the volume of capital investment in infrastructure provided by central and local government bodies, public organizations and large enterprises (on special projects) are also used.

**(a) Change in inventories**

35. Change in inventories is evaluated on the basis of data on inventories of agricultural products, gasoline, etc. Data from statistical surveys of industry on inventories in enterprises are also used. An estimate of changes in inventories in the diamond processing industry and an evaluation of unfinished production of start-up companies are added.

**5. Exports**

36. Exports of goods are determined from customs service records and data on exports from the statistical survey of industry. They also include goods that do not go through registration at customs (for example, purchases by non-residents, trade with the Palestinian Authority, etc.).

37. Exports of services are based on balance of payments data, which use information from the central bank. For distribution by type of service exported, the results of a statistical survey conducted in enterprises on the export and import of services are used.

**6. Intermediate consumption**

38. The intermediate consumption matrix is based on the coefficients of the input-output table (for 2006), which is built on the results of a special statistical survey of manufactured products and materials used in industry in 2006. When compiling the matrix, adjustments are made to account for the changes in the structure of output and intermediate consumption of industries, based on an analysis of survey results and data from financial reports of large industrial companies. Adjustments are also made to the intermediate consumption matrix because of the methodological changes resulting from the transition to 2008 SNA, such as the use of services for research and development being treated as gross fixed capital formation.

**D. Balancing supply and use tables**

39. Supply and use tables are compiled within the Israeli Central Bureau of Statistics jointly by the office of national accounts and the department of economic statistics for enterprises. As noted above, the compilation process takes information from a number of sources and different statistical systems that use a variety of data processing methods and different classifications. This leads to an imbalance between the supply and use tables and necessitates adjustments.

40. Adjustments are made to supply and use tables in phases. In the first phase, combined supply and use tables, including a column of the differences between supply and use by type of characteristic product, are passed to the appropriate departments for analysis of the differences and the development of proposals to remedy them. In the subsequent phase, joint working groups are set up between the office of national accounts and the department of economic statistics for enterprises in key areas of product use (households, NPISHs, government sector, gross fixed capital formation, etc.). The task of the joint groups includes discussing proposals and taking decisions on balancing the supply and use tables.

### **III. Reflection of the services of the Bank of Israel in the supply and use tables**

41. The Bank of Israel is the country's central bank. It operates on the basis of a special law which governs its mandate and tasks. Its main functions are: implementation of monetary policy, supervision of the banking system, ensuring the financial sustainability of the State, administration of the country's foreign exchange reserves, provision of banking services to the Government and other financial services.

42. In the system of national accounts, the Bank of Israel is defined as a State financial corporation and comes under the "central bank" subsector of the "financial corporations" sector.

43. The way in which the central bank's activities were treated and the approach to measuring the output of its services changed significantly in 2008 SNA. This meant that adjustments have had to be made to records of production and consumption of the services of the central bank in the supply and use tables for 2006, which were based on the previous system of national accounts.

44. During compilation of the supply and use tables for 2006, the services of the central bank were measured on the basis of the recommendations of the Working Group on National Accounts. Thus, the output of services of the Bank of Israel was assessed in terms of the sum of production costs, which included salaries, social insurance contributions, expenditure on intermediate consumption of goods and services, consumption of fixed capital and taxes on production. The use of services produced by the Bank of Israel was reflected as intermediate consumption of other financial intermediaries (commercial banks).

45. In 2013, the Central Bureau of Statistics began a phased transition to compilation of the national accounts on the basis of the 2008 SNA recommendations. In particular, a new interpretation of the activities of the central bank was adopted and the approach to estimating output of its services was changed. Thus, an evaluation of the output of services provided by the Bank of Israel consists of two parts: the output of market services for individual consumption and the output of non-market services for collective consumption.

46. As a result of the analysis of the nature of the services provided by the Bank of Israel, and taking into account the available information to assess their output, the function of providing banking services to the Government was adopted as the market output of the central bank services. The output of financial intermediation services provided by the central bank to the Government was estimated indirectly (by financial intermediation services indirectly measured (FISIM)). These services are used by units of the government sector as intermediate consumption in the production of non-market services provided by society for individual and collective consumption.

47. All other services provided by the Bank of Israel belong to non-market output and are valued at the sum of their production costs. Non-market output of the central bank is expressed as final government consumption.

48. Thus, as a result of the introduction of the 2008 SNA recommendations in respect of assessment of the output of services provided by the Bank of Israel, the need arose for adjustments to be made to the 2006 supply and use tables, which had been compiled on the basis of 1993 SNA. An example illustrating these changes and their impact on national accounts indicators is given below.

**Example 1. Central bank services**

Figure 1  
**Central bank services — SNA 1993**

Products	Output of the industry				Total supply	Output, central bank services: 4. Use: intermediate consumption, A1 (Banks): 4.		
	Financial services (A)		Govt. sector services (B)	Other industries				
	Bank (A1)	Central bank (A2)						
A	70	4			74			
B			100		100			
C				400	400			
<b>Total</b>	<b>70</b>	<b>4</b>	<b>100</b>	<b>400</b>	<b>574</b>			

Products	Intermediate consumption of the industry (IC)			Final use		Total use	
	A		B	C	Govt. agencies		
	A1	A2					
A	4			40		30	74
B					100		100
C	40	3	45	200		112	400
Total IC	44	3	45	240			
GDP	26	1	55	160			GDP=242
Output	70	4	100	400			

49. Figure 1 shows the activities of the Bank of Israel expressed in supply and use tables in accordance with 1993 SNA. Output of central bank services, calculated according to the sum of production costs (4), is expressed in the supply table as the output of financial services in the “central bank” subsector (A2). Because it is widely accepted that the consumers of services of the Bank of Israel are commercial banks, the use of central bank services is shown in the table as intermediate consumption of the “banks” (other financial intermediaries) subsector, recorded in column A1 (4).

Figure 2  
**Central bank services — SNA 2008**

Products	Output of the industry				All supplies	Output, central bank services: - non-market: 3 - market: 2. Use: - intermediate consumption B (gen. govt. sector services): 2 - final use govt. departments: 3.		
	Financial services (A)		General govt. sector services (B)	Other industries (C)				
	Banks (A1)	Central bank (A2)						
A	70	5			75			
B			102		102			
C				400	400			
<b>Total</b>	<b>70</b>	<b>5</b>	<b>102</b>	<b>400</b>	<b>577</b>			

Products	Intermediate consumption of the industry (IC)			Final use		Total use	
	A		B	C	Govt. depts.		
	A1	A2					
A			2	40	3	30	75
B					102		102
C	40	3	45	200		112	400
Total IC	40	3	47	240			
GDP	30	2	55	160			GDP=247 (+5)
Output	70	5	102	400			

50. Figure 2 shows the activities of the Bank of Israel expressed in supply and use tables in accordance with 2008 SNA. The central bank output (5) consists of two parts: output of market services for individual consumption (2); and output of non-market services for collective consumption (3). It is reflected in the supply table as the output of financial services in the “central bank” subsector (5).

51. Market and non-market services of the central bank are expressed differently in the use table. It should be noted that, in the example given, the market services of the central bank are banking services provided to the Government and, consequently, they are used as intermediate consumption in the production of non-market services by government sector units, B (2). This in turn leads to a corresponding increase in the output of non-market services by government sector units, as it is evaluated by calculating the sum of production costs (102); and then to an increase in final consumption expenditure of general government agencies and a rise in the country's GDP (+2).

52. The non-market services of the central bank (3) provided to society as a whole are reflected in the use table as general government agencies final consumption, which leads to an increase in the latter and a corresponding rise in the country's GDP (+3).

53. Thus, the country's GDP, calculated using the Expenditure approach, has increased by 5 units.

54. GDP also increased by this amount when calculated using the production approach. This rise consists of the increase in gross value added in the "central bank" (+1) subsector and the "other financial intermediaries" (+4) subsectors, recorded in column A1.

Table 1

**Adjustments: services of the Bank of Israel — 2006 (in millions of new sheqalim (NIS))**

Output, Bank of Israel (SNA 1993)	402
Output, Bank of Israel (SNA 2008)	580
of which:	
Market output	212
Non-market output	368
<b>Adjustments to indicators on transfer to SNA 2008</b>	
<b>"Central bank" subsector</b>	
Intermediate consumption	-
Gross value added	+178
Output	+178
<b>"Other financial intermediaries" subsector</b>	
Intermediate consumption	-402
Gross value added	+402
Output	-
<b>"General government agencies" sector</b>	
<i>relating to market output, Bank of Israel:</i>	
Intermediate consumption	+212
Gross value added	-
Output	+212
Final consumption	+212
<i>relating to non-market output, Bank of Israel:</i>	
Final consumption	+368
<b>GDP</b>	
Production approach	+580
Expenditure approach	+580

55. Table 1 presents the results of adjustments to the 2006 supply and use tables related to the introduction of the 2008 SNA recommendations on data processing and the method of evaluating the output of central bank services.

56. Thus, as a result of the revaluation of the bank's activities in accordance with the 2008 SNA recommendations, the output of central bank services increased by 178 million NIS, which, combined with the changes in the way their use is interpreted, has led to an increase of 580 million NIS in the country's GDP.

## IV. Reflection of expenditure on research and development in supply and use tables

57. In the system of national accounts, expenditure on scientific research and development represents the costs of acquiring or setting up creative development, which is the result of activities undertaken on a systematic basis to increase the stock of knowledge, including knowledge of human beings, culture and society, and its use in developing new products and devices, as well as in the creation of new and more efficient technologies.

58. The interpretation of the production and use of research and development services has changed significantly in the new 2008 SNA. This has meant that adjustments have had to be made to the records of the production and use of research and development services in the 2006 supply and use tables, which were based on the previous system of national accounts.

59. Under 1993 SNA, the use of research and development services was considered as intermediate consumption, and the production of research and development services for own use was not expressed as a separate product.

60. With the transition to 2008 SNA in the national accounts of Israel, a new way of treating research and development services was adopted, with their use, including the production of research and development services for own use, now considered as fixed capital formation. The exception is the research and development industry, in which the use of research and development services acquired or created for own use is still described as intermediate consumption of the industry.

61. There are some differences in the adjustment of supply and use tables in respect of research and development services for the corporation sector and the government agencies sector. Examples illustrating these changes and their impact on national accounts indicators are given below.

### Example 2. Research and development services (corporation sector)

62. Figure 3 shows how scientific research and development services are expressed in the supply and use tables based on 1993 SNA. In the supply table, the total volume of research and development services (33) consists of output of services of the research and development industry — B (30) — and imports of services (3). Meanwhile, the research and development services created in industry A for own use are not divided into a separate product. In the use table, research and development services (33) are expressed as intermediate consumption of industries A (10), B (2) and C (21).

Figure 3  
Research and development (R&D) services (corporations) — 1993 SNA

Products	Output of the industry			Imports (R&D)	All supplies	Output, R&D: - market: 30 (B) - for own use: (...) (A). Imports, R&D: 3. Use - IC: 10 (A), 2 (B), 21 (C)
	A	B (R&D)	C			
A	200				200	
B (R&D)	(..)	<u>30</u>		<u>3</u>	33	
C			300		300	
Total	200	30	300	3	533	

Products	Intermediate consumption of the industry (IC)			Final consumption		All use
	A	B (R&D)	C	Gross fixed capital formation	Others	
A	30	5	80	10	75	200
B (R&D)	<u>10</u>	<u>2</u>	<u>21</u>			33
C	90	10	70	15	115	300
Total (IC)	130	17	171			
GDP	70	13	129			GDP=212
Output	200	30	300			

63. Figure 4 shows how scientific research and development services are recorded in the supply and use tables using the 2008 SNA recommendations.

64. In the supply table, in contrast to the way they are recorded in figure 3, the production of scientific research and development services for own use in industry A (5) is recorded as a separate product. The output of research and development services for own use is evaluated on the basis of current production costs with the addition of the assessment of “normal” profits.

65. In the use table, in contrast to the way it is recorded in figure 3, expenditure on research and development is excluded from intermediate consumption of industries A (10) and C (21) and is recorded as gross fixed capital formation, leading to a corresponding increase in gross value added in these industries. In addition, the output of research and development services for own use in industry A (5) is allocated to a separate product and recorded as gross fixed capital formation, which also leads to an increase in gross value added of the industry. It should be noted that, in industry B — research and development — the use of research and development services is still reflected as intermediate consumption of the industry, that is, there is no change compared to the way it is recorded in figure 3.

Figure 4

**Research and development (R&D) services (corporations) — 2008 SNA**

Products	Output of the industry			Imports (R&D)	All supplies	Output R&D: - market: 30 (B) - for own use: 5 (A). Imports, R&D: 3.
	A	B (R&D)	C			
A	200				200	
B (R&D)	<u>5</u>	<u>30</u>		<u>3</u>	38	Use -
C			300		300	Gross fixed capital formation: 36
<b>Total</b>	<b>205</b>	<b>30</b>	<b>300</b>	<b>3</b>	<b>538</b>	IC (R&D): 2 (B)

Products	Intermediate consumption of the industry (IC)			Final consumption		All use
	A	B (R&D)	C	Gross fixed capital formation	Others	
A	30	5	80	10	75	200
B (R&D)		<u>2</u>		<u>36</u>		38
C	90	10	70	15	115	300
Total IC	120	17	150			
GDP	85	13	150			GDP=248 (+36)
Output	205	30	300			

66. Thus, the country's GDP, calculated using the production approach and the expenditure approach, has increased by 36 units.

### **Example 3. Research and development services (government agencies sector)**

67. Figure 5 shows the scientific research and development services produced by the government sector in supply and use tables based on 1993 SNA.

68. The supply table shows non-market output of research services produced by government sector units — B (20). All this output is reflected in the use table as final consumption in the government sector (20).

Figure 5

### **Research and development (R&D) services (government sector) — 1993 SNA**

Products	Output			All supplies	Non-market output, R&D: 20. Final consumption, government agencies: 20.
	Government sector		Other industries		
	A	B (R&D)	C		
A	80			80	
B (R&D)		<u>20</u>		20	
C			500	500	
<b>Total</b>	<b>80</b>	<b>20</b>	<b>500</b>	<b>600</b>	

Products	Intermediate consumption of industry (IC)			Final consumption			All use
	A	B (R&D)	C	Govt. agencies	Gross fixed capital formation	Others	
A				80			80
B (R&D)				<u>20</u>			20
C	50	10	300		30	110	500
Total IC	50	10	300				
GDP	30	10	200				GDP=240
Output	80	20	500				

69. Figure 6 shows the scientific research and development services produced by the government sector in supply and use tables based on 2008 SNA.

Figure 6

**Research and development (R&D) services (government sector) — 2008 SNA**

Products	Output of the industry			All supplies	R&D, non-market output: 20. Use: - Gross fixed capital formation: 15 - Final consumption, government agencies: 5. R&D, consumption of fixed capital, A : 10.
	Government sector		Other industries		
	A	B (R&D)	C		
A	90			90	
B (R&D)		<u>20</u>		20	
C			500	500	
Total	<b>90</b>	<b>20</b>	<b>500</b>	<b>610</b>	

Products	Intermediate consumption of the industry (IC)			Final consumption			All use
	A	B (R&D)	C	Govt. agencies	Gross fixed capital formation	Others	
A				90			90
B (R&D)				5	15		20
C	50	10	300		30	110	500
Total IC	50	10	300				
GDP	40	10	200				GDP=250 (+10)
Output	90	20	500				

70. There are no changes in the supply table in the production of non-market output of research and development services by government sector units — B (20). In the use table, a large part of this output is recorded as gross fixed capital formation in the government agencies sector (15), except for the part defined as not bringing benefit to the owner and recorded as final consumption by the government agencies sector (5).

71. It should be noted that treating the use of research and development services as gross fixed capital formation in the government sector makes it necessary to evaluate the accumulated consumption of fixed capital and include it in the evaluation of the output of non-market services by government sector units, which is defined as the sum of production costs. As shown in the supply table, the output of non-market services, A, by the government sector increased the evaluation of fixed capital consumption (research and development) by 10 units.

72. Thus, the country's GDP, calculated using the production approach and the Expenditure approach, has increased by 10 units.

Table 2  
**Adjustments: research and development (R&D) services — 2006 (million NIS)**

<i>Adjustments to indicators on transfer to SNA 2008</i>	
<b><i>"Corporations" sector</i></b>	
Output of R&D services (for own use)	+12615
Intermediate consumption	-2835
Gross value added	+15450
Gross fixed capital consumption	+15450
<b><i>"Government agencies" sector</i></b>	
Output of R&D services (non-market)	-
Final consumption of R&D services	-4200
Gross fixed capital consumption	+4200
Fixed capital consumption (R&D)	+4160
Output, non-market services (excluding R&D )	+4160
Gross value added	+4160

<i>Total</i>	
<b>GDP</b>	
Production approach	+19610
Expenditure approach	+19610

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73. Table 2 presents the results of the adjustment to the 2006 supply and use tables after the introduction of the 2008 SNA recommendations and the method of evaluating the output of services provided by the central bank.

74. Thus, with the capitalization of expenditure on research and development on the basis of 2008 SNA, the country's GDP grew by 19.6 billion NIS.

## V. Conclusion

75. The 2011 supply and use tables for the Israeli economy were compiled as a result of a complex process of comparative analysis of estimates of resources, products and their uses, which are determined using different approaches and are based on information from a variety of statistical systems. Some inconsistencies became apparent during compilation of the tables, and there was a need to adjust the existing assessments in some sections of the system of national accounts, both in terms of products and their use. This makes it possible to improve the evaluation of the country's GDP and its components.

76. The most recently published input-output tables, for 2006, which were put together on the basis of the recommendations of the previous system of national accounts, 1993 SNA, are essential for the compilation of the supply and use tables.

77. The 2006 input-output tables have to be adjusted to the 2008 SNA recommendations so that they can be used effectively as a basis for the supply and use tables for 2011 and subsequent years, until the compilation of new input-output tables for 2014, which are scheduled to be published in 2020.

78. We would point out that this adjustment results in a significant change in the number of components, in terms of both supply and of use, and accordingly to changes in national accounts figures. For example, as a result of the introduction of the 2008 SNA recommendations on treatment of expenditure on scientific research and development and central bank services, the evaluation of the GDP of Israel in 2006 rose by 3%.

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