

Israel Central Bureau of Statistics

It's All in the Numbers



Sattellite Accounts in Israel

Nava Brenner
Director of the Social Services Accounts sector



Existing Satellite Accounts

- 1. National Expenditure on Education (1962)
- 2. National Expenditure on Health (1962)
- 3. National Expenditure on Culture (1984)
- 4. National Expenditure on Civilian R&D (1989)
- 5. Satellite Account on Non-Profit Institutions (1981)
- 6. National Expenditure on Defense
- 7. Public Expenditure on Environment Protection



Social Services Accounts Percent of GDP

8.1%	National Expenditure on Education
7.4%	National Expenditure on Health
4.9%	National Expenditure on Culture
4.0%	National Expenditure on Civilian R&D



The Israeli Satellite Accounts

- The accounts are prepared in the framework of the National accounts and using national accounts definitions
- The accounts include detailed data on income and expenditure.
- In some accounts (R&D for example)
 we present a matrix showing a crossclassification of financing and
 performing sectors.



One Detailed Examle – National Expenditure on Civilian R&D: Sources, Tables and Outputs



Time series on R&D

- Series of National expenditure on R&D in current and constant prices were prepared by the Central Bureau of Statistics since 1989.
- Includes preliminary estimates for the last years.
- Series were prepared in a consistent manner with the national accounts and according to the OECD's methodology that has been published in the Frascati manual.







Administrative Files



Surveys



Sources of data for the National Expenditure on Civilian R&D

Business sector surveys

National Exp. on_ R&D ~ Surveys on services in the Business sector

Surveys in Universities

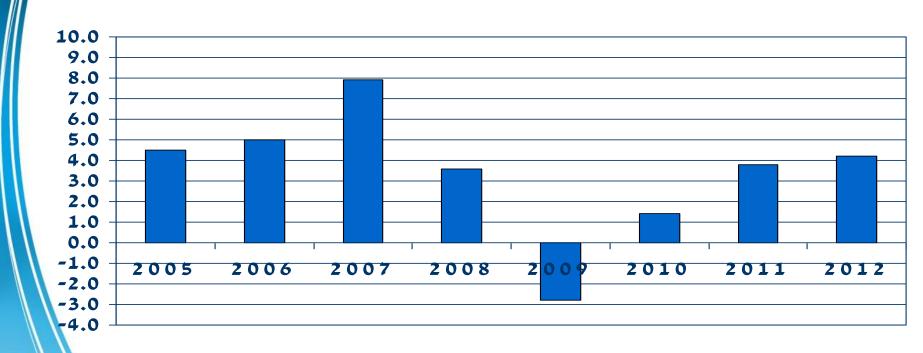
Surveys in NPIs Engaged in R&D

Analysis of Gov. Financial Reports

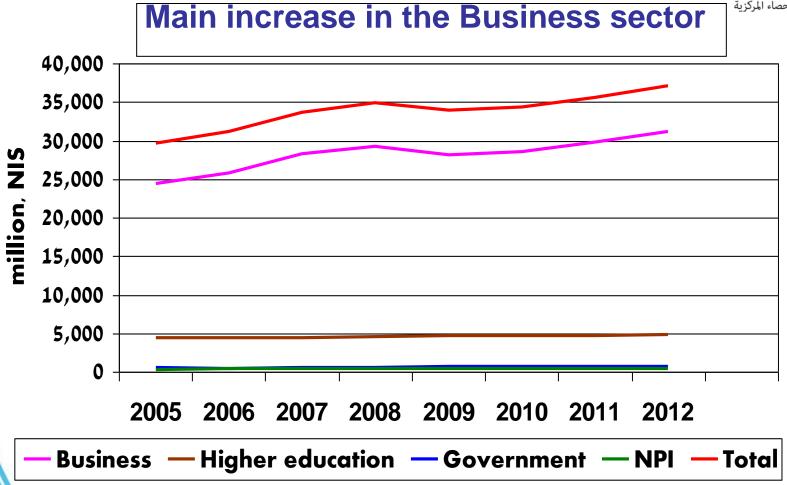
Data collection in Other Industries of the Business sector



Since 2009, increases compared to previous years







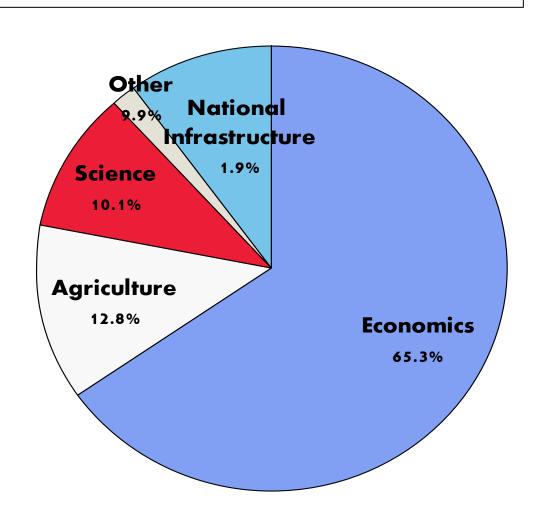


Performance and Finance in 2010

Performing sector					Financing sector
NPI	Higher Education	Gov.	Business	Total	Percents
1.2	13.6	2.0	83.2	100.0	Total
0.2	1.3	0.1	35	36.6	Business
0.5	6.3	1.9	3.5	12.2	Gov.
-	2.0	-	0.2	2.2	Higher Education
0.1	1.2	-	0.4	1.7	NPI
0.4	2.8	-	44.1	47.3	Abroad

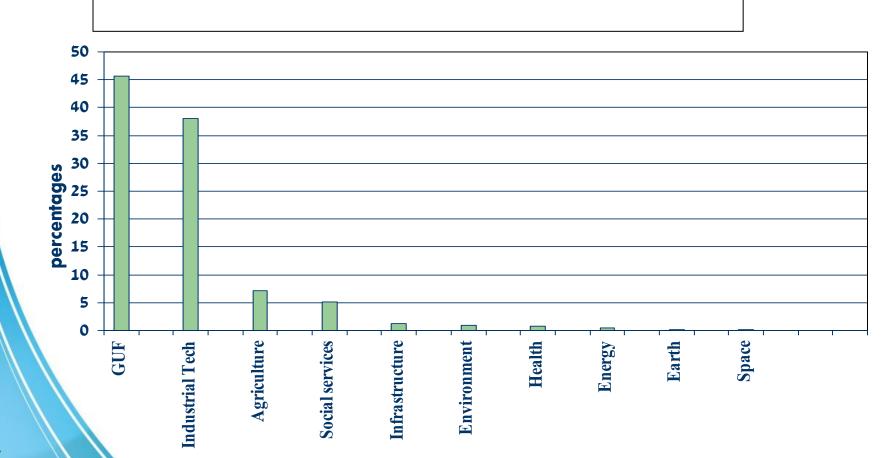


Government Ministries Finance of Civilian R&D, in 2012





Expenditure of Government Ministries, by Objective, 2012



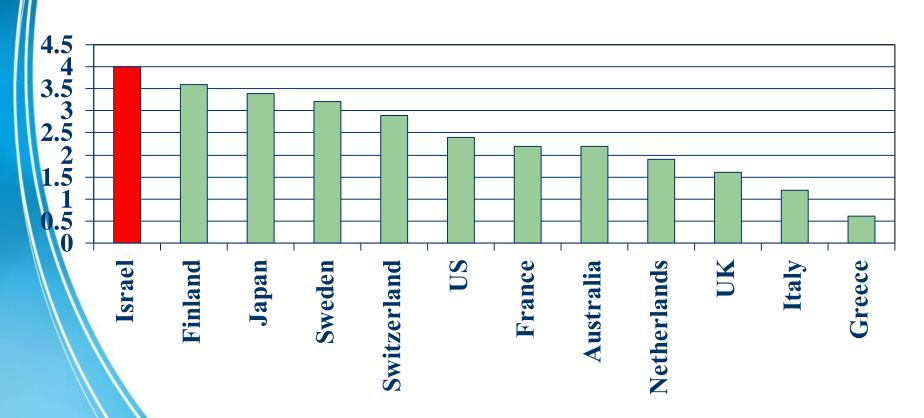


Types of R&D

- <u>Basic research</u> –is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.
- Applied research -is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective.
- Experimental development is systematic work, drawing on knowledge gained from research and practical experience that is directed to producing new materials, products and devices; to installing new processes, systems and services; or to improving substantially those already produced or installed.

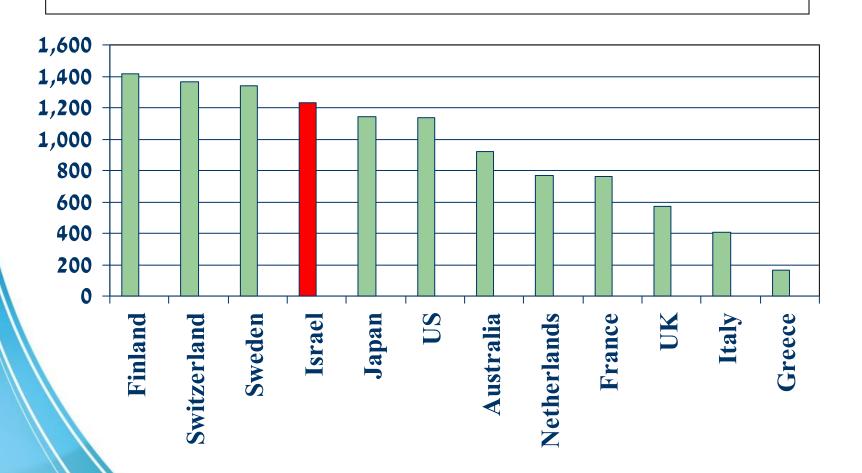


National Expenditure on Civilian R&D as a percentage of GDP 2011





National Expenditure on Civilian R&D per capita, \$ in terms of PPP 2011





FULL TIME EQUIVALENT JOBS IN CIVILIAN R&D

BY SECTOR, SEX AND EDUCATION 2011

	Total	%	Business	General government	Higher education	NPI
FULL TIME EQUIVALENT JOBS – TOTAL	68,175	100.0	57,564	837	9,220	554
Percentages	100.0		84.5	1.2	13.5	0.8
Thereof: women	16,016	23.5	12,835	513	2,415	253
EDUCATION Practical engineers and technicians	13,104	19.2	8,652	123	4,306	23
Theerof: women	3,243	4.8	2,054	55	1,128	6
Holders of academic degrees	49,797	73.1	44,596	477	4,306	418
Theerof: women	10,768	15.8	9,087	336	1,128	217
Other education	5,275	7.7	4,316	237	609	113
Theerof: women	2,005	2.9	1,694	122	159	30



R&D PERSONNEL IN THE BUSINESS SECTOR – INTERNATIONAL COMPARISON 2011

	Full Time Equivalent	R&D Personnel per thousand employed	Women researchers as a percentage of total researchers in the sector		
Country	jobs	persons in the sector			
Israel	57,564	3.9	29.7		
OECD (average)					
	77,851	9.4	21.1		
Italy	116,726	6.3	20.5		
Iceland	1,577	13.3	31.8		
Ireland	14,120	10.8	22.3		
Germany	345,000	11.4	12.7		
Denmark	37,242	20.0	23.9		
Netherlands	54,139	9.1	14.2		
United Kingdom	158,321	7.0	19.9		
Japan	602,252	11.4	7.6		
Luxembourg	3,388	11.5	11.4		
Spain	89,841	6.6	29.1		
Finland	31,180	17.6	16.8		
France	230,735	12.5	19.5		
Korea	254,280	12.8	12.8		
Canada	136,200	10.2			
Sweden	54,769	17.7	25.5		
Switzerland	39,832	12.0	39.8		



 Many options for international comparisons

 Close contact with international organizations – OECD, WHO, EUROSTAT



THANK YOU FOR YOUR ATTENTION!