

CHAPTER XIV

FLOW OF FUNDS

1. MAIN DEVELOPMENTS¹

THE PUBLIC SECTOR continued to run a big demand surplus in 1972, and there was a further rapid growth in that of the public sector companies, as well as an appreciably larger demand surplus by the nonprofit institutions. These increases were again offset by a further rise in the private sector's supply surplus (reflecting primarily the continued uptrend in the rate of private saving). But this was not sufficient to counterbalance the inflationary influence of the other sectors' demand surpluses, especially that of the public sector; consequently, there was a steep jump in the general price level, but the balance of payments deficit on current account was not aggravated because of a combination of special factors.

The public sector demand surplus rose by approximately IL 200 million, as in 1971, and totalled nearly IL 4,000 million. In real terms, it declined during the past two years, but in both 1972 and 1971 the sector's real (nonfinancial) transactions expanded by about 20 percent, which in itself had an inflationary impact. What is more, those sectors where the volume of activities is largely determined by the Government—such as the local authorities, public sector companies, and nonprofit institutions—greatly increased their demand surplus in the year reviewed.

The public sector companies' demand surplus soared by about 50 percent, as in 1971, and reached IL 1,025 million. But this increase does not fully reflect the change in the sector's influence on aggregate domestic demand, since the sizable 1971 surplus stemmed predominantly from the import of ships and aircraft and hence did not add to the demand pressure on the national product.

No direct data are available on the demand and supply surpluses of private business and households, which make up the private sector. But various indicators derived from the flow-of-funds tables for the economy point to a continuation of the previous year's trend in the supply surplus of the combined sector. Despite the greatly expanded level of economic activity, the demand surplus of private business decreased, apparently reflecting a growth in business saving; the supply surplus of households, on the other hand, continued upward. The

¹ The conceptual framework of flow-of-funds analysis is described in section 2. A more detailed explanation of the flow-of-funds approach may be found in M. Heth, *The Flow of Funds in Israel* (Jerusalem: Bank of Israel, 1968).

overall supply surplus of the private sector came to IL 770 million in 1972, compared with IL 225 million in 1971 and a small demand surplus in 1970.

While the aggregate demand surplus of the economy was about the same as in the two preceding years, it was financed quite differently in 1972. This change was connected with the further impressive growth of unilateral transfers from abroad—these were almost equal to the total import surplus (compared with 64 and 53 percent in 1971 and 1970 respectively). The financing of the public sector demand surplus also underwent a marked change in 1972: net credit from abroad and from the banking system—that is, the inflationary printing of money—covered only 30 percent of the demand surplus, after having provided 80 percent in 1971. But it should be noted that foreign unilateral transfers to the public sector more than doubled in the year reviewed to stand at IL 1,385 million.

The financing of the demand surpluses of the public sector companies and nonprofit institutions also changed noticeably in 1972. Net foreign borrowing by the public sector companies was down steeply, mainly because of the sharp cutback in imports of ships and aircraft and other investment goods, which are financed by foreign suppliers' credit. At the same time, the companies borrowed much more heavily from both the financial and nonfinancial domestic sectors—IL 740 million as against IL 265 million in 1971.

The flow of funds from the nonprofit institutions to the domestic financial institutions (debt repayment) ceased in 1972, and there was a further increase in the share of unilateral transfers from abroad in the sector's demand surplus.

2. CONCEPTUAL FRAMEWORK OF FLOW-OF-FUNDS ANALYSIS

The flow-of-funds system is a statistical framework that describes the financial transactions accompanying the economic activity of the various economic units. For this purpose a distinction is made between real transactions (financial transactions reflecting trade in goods and services), domestic transfer payments (taxes, subsidies, etc., which absorb or inject purchasing power), and financial transactions (the granting and receiving of credit among the various units within the economy and between the economy as a whole and the rest of the world). This differentiation, combined with the division of the economy into a number of sectors, each comprising units resembling one another in character and behavior, makes it possible to present a clear picture of changes in the relative contribution of the various units to the financial developments which accompany—and to a large extent determine—the changes in the national product (and import surplus) and in the price level. The influence of the various sectors on the level of aggregate domestic demand is measured by means of two indicators:

(1) The sectoral demand (or supply) surpluses and changes therein. A demand surplus is defined as the difference between the sector's income from

the sale of goods and services plus domestic transfer receipts on the one hand and its outlays on capital and current account plus domestic transfer payments on the other. In other words, it represents the difference between the sector's use of real resources and its contribution to the supply of real resources.

(2) The way the demand surpluses of the various sectors are financed, i.e. the credit flows among the sectors. In general, the sectors that are net lenders are those with supply surpluses. However, it is possible for a sector to be a net supplier of credit to other domestic sectors and yet have a demand surplus, if its unilateral transfers (or net credit) from abroad exceed its demand surplus.

The funds-flow system of the Israeli economy, which provides quantitative data for the above indicators, distinguishes nine sectors, which in turn can be divided into three broad groups: the domestic real sectors, the rest of the world, and the domestic financial sectors.

(1) Domestic real sectors, active mainly in the production and use of goods and services, are nonfinancial business firms, households, the public sector (the Government, National Institutions, and local authorities), public sector companies,² and nonprofit institutions. The level of activity of the nonfinancial business sector is determined by forces endogenous to the economy. In contrast, the level of public sector activity (and to a lesser extent that of public sector companies and nonprofit institutions) may be expected to be determined by factors exogenous (and countercyclical insofar as possible) to the economy.

(2) Rest-of-the-world sector—all economic units outside the Israeli economy.

(3) Domestic financial sectors—whose principal function is direct and indirect intermediation³ between the domestic real sectors with demand surpluses on the one hand and those with supply surpluses and the rest-of-the-world sector on the other. In this group are found the banking system (banking institutions and the Bank of Israel), financial institutions⁴ (which specialize in the allocation of credit to the various sectors of the economy, in accordance with public sector directives), and social insurance funds and insurance companies (the main contractual savings institutions in Israel).

The usefulness of flow-of-funds analysis and the conclusions that can be drawn are still very circumscribed because of technical and theoretical problems.

With respect to the latter, there is no complete body of theory comparable, for example, to input-output theory, which is based on a statistical framework

² Public sector companies are enterprises operating as autonomous legal entities (as distinct from the Post Office and Israel Railways, for example), and at least 25 percent of whose equity capital is owned by public sector authorities, which actively participate in their management. They include Amidar, Mekorot, Israel Electric Corporation, Zim, El Al, Rasso, and others.

³ The funds mobilized by a financial sector from a real sector with a supply surplus are not always transferred directly to a real sector with a demand surplus, but may pass through a number of intermediaries.

⁴ On the nature of the activity and degree of autonomy of this sector see Chapter XV, "Financial Institutions", section 2.

with characteristics similar to those of the flow-of-funds structure. Further, the flow-of-funds system of accounts cannot in itself answer the question whether the availability of funds induced a sector to expand its demand, or whether heavier demand necessitated recourse to external sources of funds. The function of the system is generally limited to presenting the relevant magnitude to be explained, and other analytical systems are required in order to determine the relationship between the creation of a demand surplus and its financing.

On the technical plane, the analysis is limited by the lack of data permitting a separation or differentiation of the nonfinancial transactions and part of the financial transactions of businesses from those of households. This deficiency is particularly serious in view of the dissimilar nature of the two sectors and their considerable weight in total economic activity. Another shortcoming, largely peculiar to the flow-of-funds system in Israel, is connected with the value-linkage (either to the dollar or to the cost-of-living index) of part of the liabilities of the various sectors. This practice, combined with the principle of accounting conservatism, results at a time of inflation (or devaluation) in marked discrepancies between the flow-of-funds estimates for the various sectors as derived from their financial reports. The closing and balancing of the system by adjusting entries based on rough estimates impairs the reliability of the derived data.⁵

Despite these shortcomings, the construction of a comprehensive and closed flow-of-funds system is still very useful, for the simple reason that it provides an overall picture of developments in the capital and money markets and makes it possible to analyze various aspects of the activity in these markets (and structural changes therein). If the analysis of financial transactions were limited to the individual sectors, it would not be possible to derive information on the flow of funds of the private sector, for which direct data are not available. In addition, the construction of a flow-of-funds system provides a useful check on the consistency of the financial transactions data of the various sectors.

3. DEMAND SURPLUSES OF THE REAL SECTORS⁶

The public sector demand surplus was, at IL 4,000 million, up 6 percent, about the same as in 1971. While the relative stability in the growth rate over the past two years implies a decrease in real terms because of the rapid price rise,

⁵ If the whole system were value-linked, this technical problem would be resolved.

⁶ The discussion in this section will be limited to the real sectors; the influence of the financial sectors on economic activity is described in section 5, which deals with the sectoral credit flows. The changes in the supply surplus of the financial sectors—the difference between the business saving of the institutions and their investment in premises and equipment and other real estate—has no significance for analyzing the demand pressures prevailing in the economy.

it should be noted that in both 1971 and 1972 the sector's real transactions expanded by some 20 percent. This in itself had an inflationary effect, for the influence of an increased expenditure is not balanced by that of an equal increase in tax revenue.

Another point should be noted in this connection: On the one hand, much of the housing credit granted by the public sector (which grew appreciably during the past two years) was actually for financing the public sector's stock of finished dwelling units and units under construction, so that it would have been more correct to include such credit (if it could be isolated) with real transactions. On the other hand, compulsory loan collections, which are recorded *in toto* as a credit transaction, contain a substantial tax element (which, if taken into account, would undoubtedly reduce the demand surplus of the public sector). Thus it follows that, if the public sector's demand surplus could have been measured more precisely, the surplus would have been greater in the last two years than shown by the tables in this chapter.

As opposed to the laggard increase in the public sector's demand surplus, there was a steep rise in those of the public sector companies and nonprofit institutions, whose scope of activities is largely determined by the public sector.

In 1970 public sector companies ran a slightly bigger demand surplus than in the previous year, while the sizable increase in 1971 was connected with the large-scale import of ships and aircraft and other investment goods (which did not augment the demand pressure on the national product). The sharply higher 1972 demand surplus had a much greater inflationary effect than those in the two previous years. During this period the surplus grew by IL 375 million in 1970, IL 695 million in 1971, and IL 1,025 million in 1972.

The demand surplus of the nonprofit institutions totalled IL 530 million, as against IL 415 million and IL 375 million in 1971 and 1970 respectively.

As regards the private sector, the indirect estimate shows an increase of IL 766 million in its overall supply surplus, compared with IL 224 million in 1971. Although there is no way to directly and precisely measure the contribution of each of the two subsectors, various indicators derived from the flow-of-funds set of accounts for the economy strengthen the assumption that the continued uptrend in the household supply surplus was accompanied by a decline in the demand surplus of private business firms despite the further vigorous expansion of economic activity. In other words, along with the increase in the financial savings of households, in the form of both compulsory savings and social insurance fund membership, there was apparently a relatively large increase in business saving.

Table XIV-1

SECTORAL DEMAND AND SUPPLY SURPLUSES, 1970-72

(IL million)

	Purchases		Sales	Net purchases (1+2-3)	Transfers		Net transfer receipts (6-5)	Demand or supply (-) surplus (4-7)
	On current account	On capital account			To domestic sectors	From domestic sectors		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Business and households ^a								
1970	—	3,187	—	—	—	—	—	10
1971	—	4,173	—	—	—	—	—	-224
1972	—	5,156	—	—	—	—	—	-766
Public sector ^b								
1970	7,739	745	956	7,528	2,285	6,222	3,937	3,591
1971	9,981	991	1,521	8,921	3,486	8,595	5,109	3,812
1972	10,804	1,409	1,491	10,722	4,117	10,813	6,696	4,026
Public sector companies ^c								
1970	2,184	814	2,576	422	32	79	47	375
1971	2,755	1,344	3,260	839	38	183	145	694
1972	3,829	1,572	4,313	1,088	59	121	62	1,025

Nonprofit institutions ^b									
1970	1,305	258	302	1,261	27	913	886	375	
1971	1,597	370	354	1,613	31	1,195	1,164	415	
1972	1,863	449	420	1,892	47	1,423	1,369	530	
Social insurance funds and insurance companies ^b									
1970	412	14	475	-49	477	431	-46	-3	
1971	490	9	689	-190	609	551	-58	-132	
1972	601	13	846	-232	760	719	-41	-191	
Banking system ^d									
1970	1,203	39	1,398	-156	144	—	-144	-12	
1971	2,003	46	2,174	-125	179	—	-179	54	
1972	2,660	30	3,000	-310	209	—	-209	-101	
Financial institutions ^b									
1970	537	1	635	-97	65	—	-65	-32	
1971	747	-1	875	-129	82	—	-82	-47	
1972	1,000	—	1,150	-150	100	—	-100	-50	
Rest of the world ^e									
1970	4,891		9,208	-4,317	—	—	—	-4,317	
1971	7,084		11,654	-4,570	—	—	—	-4,570	
1972	9,269		13,742	-4,473	—	—	—	-4,473	

^a Calculated as a residual by deducting the supply surpluses of other sectors from the demand surpluses.

^b For the definition of the sector see the relevant chapter in this Report.

^c Companies in which the public sector holds at least 25 percent of the equity capital and actively participates in the management.

^d Commercial banks, cooperative credit societies, and the Bank of Israel.

^e For this sector purchases are identical with Israel's exports and sales are identical with imports as recorded in the balance of payments; the surplus is identical with the balance of payments deficit on current account, at the official rate of exchange.

4. FINANCING THE DEMAND SURPLUSES⁷

The aggregate demand surplus of the economy came to IL 4,500 million in 1972, down fractionally from the previous year. It was financed almost completely by unilateral transfers from abroad (in 1971 and 1970 this source covered respectively 64 and 53 percent of the import surplus). This extraordinary development was made possible thanks to a 50 percent jump in the already high level of such receipts.

This was accompanied by a very mild decline in net foreign credit to the domestic real sectors—from IL 2,180 million in 1971 to IL 2,070 million. The result was a further swelling of foreign exchange reserves held in the banking system, which fueled the rapid monetary expansion.

The financing of the public sector demand surplus had less of an inflationary effect in 1972 than in the previous year. While the share of credit from the domestic real sectors, financial institutions, and social insurance funds increased, net credit from the foreign sector and the banking system covered some 30 percent of the public sector's demand surplus this year, compared with approximately 80 percent in 1971. But it should again be stressed that in 1972 unilateral transfers from abroad to the public sector soared 50 percent to reach a sizable IL 1,385 million, and this source of financing has no less of an inflationary effect than foreign credit.

As regards the financing of the public sector companies, the contribution of the domestic sectors grew appreciably, from 38 percent in 1971 to 72 percent; this accompanied a much heavier volume of domestic purchases by the companies and a decline in their overseas purchases on capital account. Among the domestic real sectors, the public sector continued to be the principal source of funds; among the financial sectors, first place was held by the financial institutions, which obtain a large percentage of their funds from the public sector at low interest rates and subject to its directives.

With respect to the private sector, it should be noted that nearly all the errors and omissions in the other sectors' accounts are accumulated in the estimates for households and business. This is because of the roundabout way of estimating how the sector's demand surplus is financed or how much credit it has made available to the rest of the economy (if it has a supply surplus). As for the other domestic sectors, even when errors and omissions are detected in the course of the analysis, the problem can generally be resolved without making arbitrary decisions, since direct information is available on these bilateral flows. But this does not hold for the private sector. In the last two years there were two outstanding developments in the composition of its supply surplus: On the one hand, there was a further rapid increase in net credit from households to the public sector (mainly through the purchase of Government

⁷ The demand surplus of the economy as a whole is financed by unilateral transfers and net credit from abroad.

bonds) and to the social insurance funds and insurance companies, as well as a sharply higher volume of unrequited receipts from abroad. On the other hand, a heavier net borrowing from abroad made private business less dependent on the banking system for financing its demand surplus.

5. INTERSECTORAL CREDIT FLOWS

Credit-flows tables give a schematic presentation of the network of intersectoral financial relationships accompanying the saving-investment process and make it possible to trace the changes that occur in the pattern and size of the flows.

It is the character of the various sectors that largely determines the direction of their credit flows. Financial institutions, which are secondary financial intermediaries, obtain most of their funds from the financial sectors and transfer them to the real sectors. The social insurance funds and insurance companies are primary intermediaries, receiving credit from the real sectors and transferring it chiefly to the financial sectors. Among the domestic real sectors there is only one that grants more credit than it receives—households. The rest-of-the-world sector also supplies much more credit than it receives. The other real sectors—the public sector, private business, public sector companies, and nonprofit institutions—are all credit recipients. In addition to its real transactions, the public sector fulfills the function of financial intermediation—both directly, as reflected in the credit-flows tables, and indirectly by channelling most of the resources of the social insurance funds and insurance companies to the financial institutions, where it controls the allocation of funds.

The intersectoral credit flows are often bilateral, and it is of interest to analyze each flow separately, even though the outflow must be set off against the inflow of each pair of sectors in order to determine which sector in the final analysis made funds available to the other.

The changes in the structure of credit flows must be analyzed with considerable caution, especially in interpreting the data for the private sector in general and its component segments in particular. As already pointed out, this is because of the residual method used for obtaining data on part of the sector's credit flows. In addition, credit transactions between households and private business probably increased in the last two years in the wake of the vigorous expansion of economic activity.

The principal changes that took place in the structure of credit flows in 1972 are as follows:

(1) There was a relatively big increase in gross credit supplied to households by other domestic sectors (especially housing loans by the public sector) and a continued strong growth in gross credit from households to the public sector (through the purchase of bonds and compulsory loans) and to the social insurance funds (contractual savings).

Table XIV-2
 FINANCING OF SECTORAL DEMAND SURPLUSES, 1970-72^a
 (IL million)

	Transfers from abroad	Net credit received or granted (-)				Total net credit ^b (2+5)	Errors and omissions	Demand or supply (-) surplus (1+6+7)
		From abroad ^b	From domestic sectors		Total ^b (3+4)			
			Financial ^b	Real ^b				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Business and households								
1970	1,266	380	-1,286	-6	-1,292	-912	-344	10
1971	2,017	-24	-1,837	-315	-2,152	-2,176	65	-224
1972	2,672	315	-2,458	-1,359	-3,817	-3,502	64	-766
Public sector								
1970	782	1,683	1,445	-306	1,139	2,822	—	3,604
1971	610	1,773	1,577	-148	1,429	3,202	—	3,812
1972	1,385	1,475	489	677	1,166	2,641	—	4,026
Public sector companies								
1970	—	-93	224	230	454	361	14	375
1971	—	430	2	263	265	695	-1	694
1972	—	282	214	525	739	1,021	4	1,025

Nonprofit institutions

1970	225	—	66	82	148	148	2	375
1971	280	—	-75	210	135	135	—	415
1972	374	—	-1	157	156	156	—	530

Social insurance funds and insurance companies

1970	—	-8	-486	482	-4	-12	9	-3
1971	—	-10	-703	576	-177	-137	5	-132
1972	—	-13	-1,192	1,017	-175	-188	-3	-191

Banking system

1970	—	299	174	-446	-272	27	-39	-12
1971	—	-658	288	397	685	27	27	54
1972	—	-2,367	542	1,782	2,324	-43	-58	-101

Financial institutions

1970	—	88	312	-485	-173	-85	53	-23
1971	—	152	415	-640	-225	-73	24	-49
1972	—	378	650	-1,043	-393	-15	-35	-50

Rest of the world

1970	-2,273	—	-379	-1,970	-2,349	-2,349	305	-4,317
1971	-2,907	—	516	-2,179	-1,663	-1,663	—	-4,570
1972	-4,431	—	2,082	-2,072	-70	-70	28	-4,473

^a From Table XIV-3.

^b From Table XIV-1.

Table XIV-3

GROSS INTERSECTORAL CREDIT FLOWS, 1971-72*

(IL million)

Borrowing sector	Public sector	Public sector companies	Non-profit institutions	Business	Households	Total credit to domestic real sectors	Rest of the world	Banking system	Social insurance funds and insurance companies	Financial institutions	Total credit granted
Public sector											
1971	×	399	133	1,090	265	1,887	281	147	1	379	2,235
1972	×	460	114	1,272	638	2,484	1,768	510	14	268	5,044
Public sector companies											
1971	89	×	—	104	88	281	84	139	1	60	565
1972	79	×	—	207	206	492	34	265	41	38	870
Nonprofit institutions											
1971	—	—	×	—	—	—	—	90	—	29	119
1972	131	—	×	—	—	131	—	12	—	64	207
Business											
1971	855	72	51	×	^b	978	838	370	128	104	2,418
1972	1,470	278	117	×	^b	1,865	477	858	178	285	3,663

Households											
1971	795	73	26	^b	×	894	39	1,992	791	202	3,910
1972	1,481	279	57	^b	×	1,817	—	2,116	1,176	459	5,568
Rest of the world											
1971	2,594	514	—	853	—	×	×	2,263	—	182	6,406
1972	3,243	316	—	792	—	×	×	1,988	—	384	6,723
Banking system											
1971	1,420	50	19	870	-18	2,341	2,921	×	70	216	5,548
1972	257	307	55	1,148	212	1,979	4,355	×	-1	303	6,636
Social insurance funds and insurance companies											
1971	70	64	—	106	105	345	10	474	×	292	1,121
1972	134	70	—	98	90	392	13	658	×	531	1,594
Financial institutions											
1971	614	88	25	505	182	1,414	30	100	-7	×	1,537
1972	890	181	20	792	274	2,157	6	186	-2	×	2,347
Total credit received											
1971	6,437	1,260	254	3,528	622	12,101	4,743	5,575	984	1,464	×
1972	7,685	1,891	363	4,309	1,420	15,672	6,653	6,593	1,406	2,332	×
Errors and omissions											
1971	—	-1	—	-55			—	27	5	24	—
1972	—	4	—	64			28	-58	-3	-35	—

^a The data for 1971 were revised.

^b No data are available on the credit flows between these sectors.

(2) Gross lending from the public sector to private business increased by a relatively modest 15 percent, as contrasted with the continued surge of gross financial institution credit (up 90 and 60 percent in 1972 and 1971 respectively). This reflects the shift from direct Government financing in the form of development budget loans to credit supplied indirectly through the financial institutions.

(3) The financial institutions received less gross credit from the public sector, but much more from the social insurance funds (the purchase of bonds issued by the financial institutions, which the Government treats as a recognized investment), the rest of the world, and the private sector. These changes are the reverse side of the development mentioned above—a drop in the share of foreign credit and transfers and of bank credit in financing the public sector's demand surplus. In this context it should be pointed out that most of the funds accumulated in the social insurance funds are channelled by the Government to the financial institutions, which in turn lend them out to the various sectors and home buyers in accordance with Government directives. Accordingly, the Government's influence on the credit flows is not confined to the sums which it provides directly, but also extended in 1972 to much of the credit granted this year by the financial institutions.

(4) Private business provided much more credit to the banking system this year, reflecting the marked expansion of the money supply and time and saving deposits of the public.

(5) The public sector and its companies borrowed less heavily (net) from abroad in 1972, while private business and the financial institutions stepped up their net borrowing from this source (a Treasury permit is required for such loans).