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Michael Grömling\*

# Ways to Interpret Turkey's Current Account

*In order to qualify for EU membership Turkey will have to fulfil a number of economic criteria. With this in mind, the following article examines the Turkish current account in the period 1975 to 2004, in which it has shown a consistent pattern of surplus in transfers and trade in services, and deficits in factor incomes and in trade in goods. Several contradictory interpretations of the facts are then discussed.*

Turkey strives to join the European Union. To qualify for EU membership a number of economic criteria have to be fulfilled.<sup>1</sup> According to the conclusions of the Copenhagen European Council of June 1993 EU membership requires the existence of a functioning market economy and the capacity to cope with competitive pressure and market forces within the Union.<sup>2</sup> Special attention is also paid to external relations.

Between 1975 and 2003 the balance of exports and imports of goods and services did not impact Turkey's growth performance. Over the entire period its real gross domestic product (GDP) grew at the same rate, whether the trade balance is taken into account or not. A year-by-year analysis reveals enormous positive as well as negative effects on GDP growth in single years (Figure 1), however. This was particularly the case during the balance of payments crises in 1994 and 2001. Since the mid-1990s real GDP growth was mostly restrained by the negative external trade balance. Without the diminishing impact of the balance of exports and imports, and ignoring the year 2001, Turkey's real GDP would have grown by an additional 1.3 percentage points.

The balance of exports and imports of goods and services is part of the current account, which covers all cross-border transactions of an economy. Against the background of the enormous growth effects documented in Figure 1 this study traces the development of the Turkish current account and presents different, but equally valid interpretations.<sup>3</sup> This variation results from the fact that the different interpretations are connected by the bookkeeping principles used by the national income accounts and the balance of payments accounts. In addition, the different perspectives on a given current account situation render information not only on the external relations but also on the internal state of an economy. On the whole the current account balance allows a consistent insight into the

external and domestic situation and development of a country.

The following study presents several interpretations of the Turkish current account during the period 1975 to 2004. The starting year was chosen because some of the relevant data are only available since the mid-1970s. Figure 2 shows the development of Turkey's current account in billion US dollar and as a percentage of nominal GDP. In all but six years the current account balance was negative. In 2004, the current account deficit reached a record level of \$15.6 billion or 6 per cent of GDP. However, current account deficits of 5 per cent of GDP also occurred in earlier years.

## Structure of the Turkish Current Account

The current account is part of the balance of payments, which also includes the capital account, reserve assets and net errors and omissions. The current account balance can be separated into four parts:

- the trade balance, which covers exports and imports of goods
- the balance of services, which includes exports and imports of services (e.g. tourism, financial services)
- the balance of income, which covers cross-border capital and labour incomes (e.g. interest payments and returns on foreign direct investment)
- current transfers, which include, for example, worker remittances and official transfers to international institutions.

To simplify matters we add the balance of goods and services and current transfers and call the sum

<sup>1</sup> Ansgar Belke: Turkey and the EU: Issues and Challenges, in: *INTERECONOMICS*, November/December, 2004, pp. 288-292; Harry Flam: Turkey and the EU: Politics and Economics of Accession, in: *CESifo Economic Studies*, Vol. 50, No. 1, 2004, pp. 171-210.

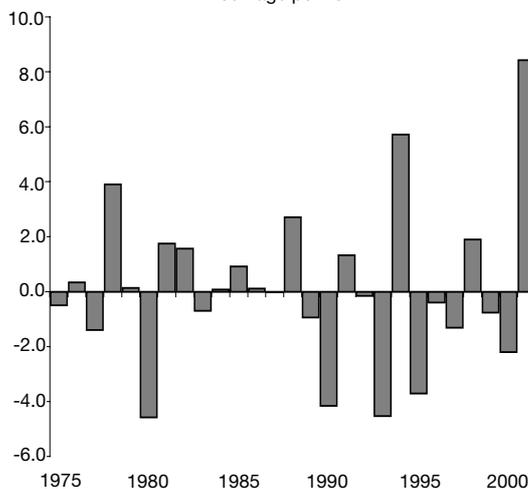
<sup>2</sup> EU Commission: 2004 Regular Report on Turkey's progress towards accession, Brussels 2004.

<sup>3</sup> Rüdiger Dornbusch, Stanley Fischer, Richard Startz: *Macroeconomics*, 8th ed., New York 2001; Jeffrey Sachs, Felipe Larraín: *Macroeconomics in the Global Economy*, Englewood Cliffs 1993.

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**Figure 1**  
**Growth Effect of the Turkish Trade Balance**

GDP growth with and without the trade balance,<sup>1</sup> difference in percentage points



<sup>1</sup> Balance of exports and imports of goods and services.

Sources: OECD; own calculations.

primary current account, where X stands for exports and M for imports ( $PCA = X - M$ ). The current account balance (CA) is defined as:<sup>4</sup>

$$(1) CA = X - M + r^*B_{t-1}^f \quad \text{or} \quad CA = PCA + r^*B_{t-1}^f$$

$B^f$  stands for the net external position and  $r^*B_{t-1}^f$  for cross-border net interest payments on the external debt ( $B^f < 0$ ) or external wealth ( $B^f > 0$ ),  $r$  representing a uniform lending and borrowing rate. The current account balance is the sum of the two positions ( $X - M$ ) and  $r^*B_{t-1}^f$ . A current account deficit can emerge even if there is a surplus in the primary current account ( $X > M$ ). This is the case when cross-border factor incomes – for example because of high interest payments on high external debt – are higher in absolute terms than the PCA surplus.<sup>5</sup>

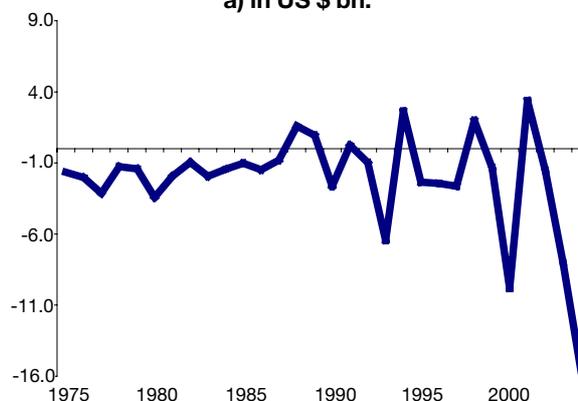
Turkey's current account shows a consistent pattern since the mid-1970s: a surplus in transfers and trade in services, and deficits in factor incomes and in trade in goods.

*Trade in goods:* During the last four years the deficit in trade in goods markedly increased and amounted to US \$24 billion in 2004. Only in 2000 was the level nearly as high. As a percentage of GDP the present trade deficit (9.5 per cent) is less outstanding. Trade deficits of more than 6 per cent of GDP were often realised in earlier years. However, the present deficit emerges in spite of the export boom. In 2004, exports of goods exceeded the level of the previous year by

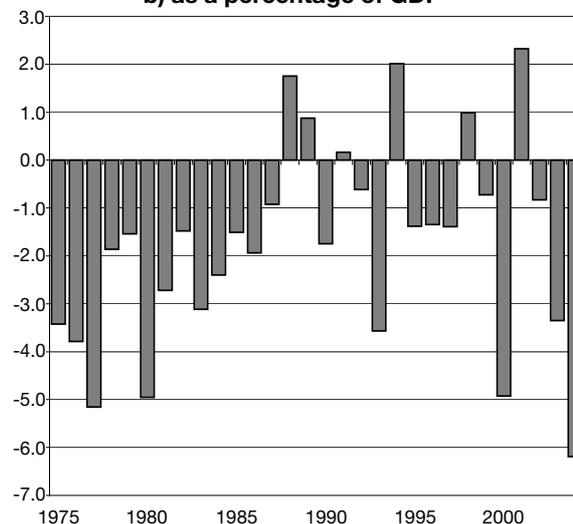
<sup>4</sup> Jeffrey Sachs, Felipe Larrain, op. cit.

<sup>5</sup> See Brazil or Mexico in the late 1980s (ibid.).

**Figure 2**  
**Turkey's Current Account Balance**  
**a) in US \$ bn.**



**b) as a percentage of GDP**

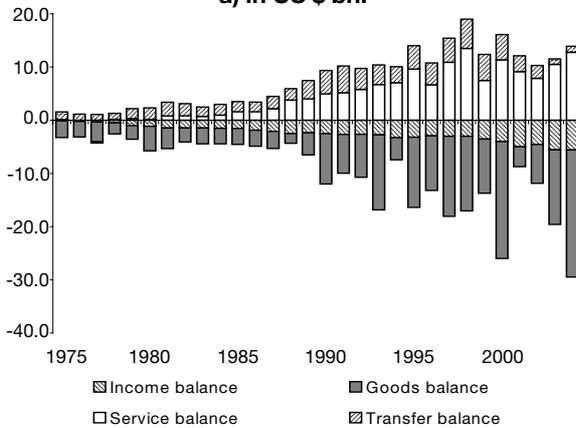


Sources: Central Bank of the Republic of Turkey (CBRT); own calculations.

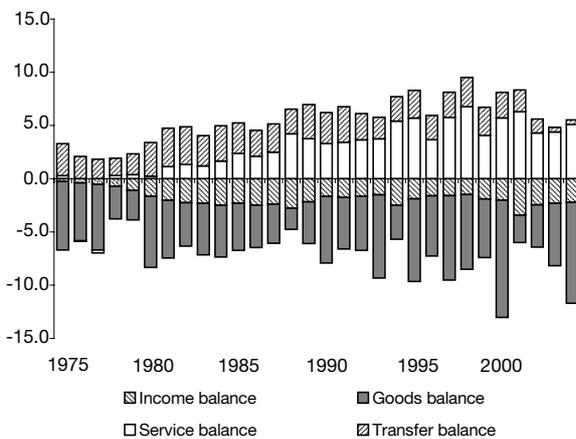
30 per cent. This can be explained by the improved competitiveness of the Turkish economy as a result of rising productivity, decreasing unit labour costs and, of course, the booming world economy. In particular exports of manufactured goods, which account for 90 per cent of Turkey's goods exports, soared recently. Exports of electrical machinery and equipment, motor vehicle parts and iron/steel rocketed. More than half of the exports went to the EU. Nevertheless, the export boom was not sufficient to diminish the chronic trade deficit because imports of goods also shot up by 40 per cent in 2004. There are several reasons for this development. One is the strong recovery after the economic crisis in 2001.<sup>6</sup> The corresponding invest-

<sup>6</sup> Serhan Cevik: Turkey: Fear Mongers, 2004, <http://www.morganstanley.com/GEFdata/digests/20040827-fri.html> [27.08.2004]; Central Bank of the Republic of Turkey (CBRT): Balance of Payments Report, September, Ankara 2004; Organisation for Economic Co-operation and Development: OECD Economic Surveys 2004 Turkey, Paris 2004.

**Figure 3**  
**Structure of the Turkish Current Account**  
**a) in US \$ bn.**

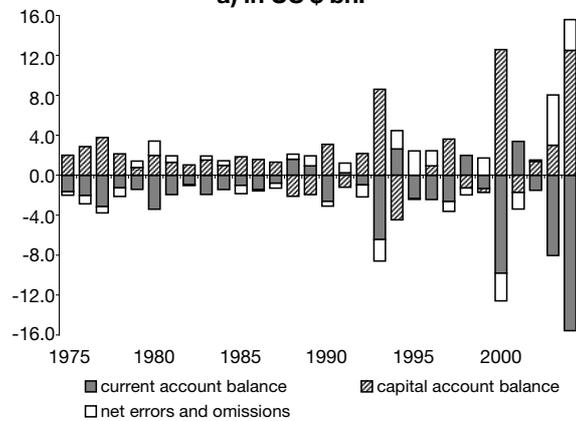


**b) as a percentage of GDP**

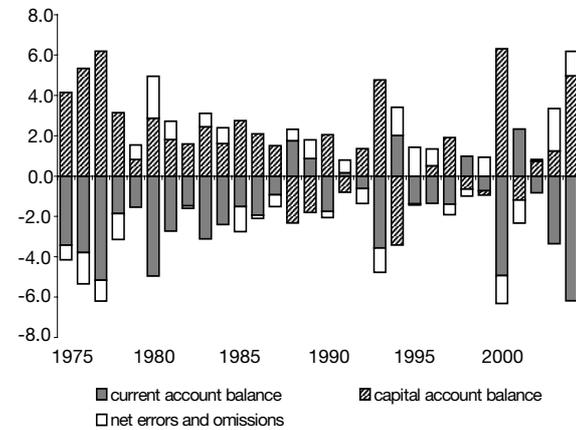


Sources: CBRT; own calculation.

**Figure 4**  
**Turkey's Current and Capital Account Balances**  
**a) in US \$ bn.**



**b) as a percentage of GDP**



Capital account balances includes currency reserves.

Sources: CBRT; own calculation.

ment boom led to increasing imports of investment goods. More than 80 per cent of Turkish imports were capital and intermediate goods. Higher oil and gas prices also inflated the trade deficit – 14 per cent of Turkish imports are energy imports. In addition pent up demand and declining interest rates boosted imports of consumption goods. The recent exchange-rate development fostered imports as well as exports.<sup>7</sup> Most of Turkey's imports are billed in US dollars and most of the exports in euro. Finally, imports and exports were pushed by the appreciation of the euro against the US dollar and the simultaneous appreciation of the Turkish lira against the US dollar and the depreciation of the Turkish lira against the euro.

*Trade in services:* The deficit in goods trade is partly compensated by a surplus in cross-border services trade, in particular revenues from tourism. Turkey expanded its travel revenues despite declining global

travel due to the geopolitical uncertainties.<sup>8</sup> In 2004, travel revenues rose by nearly 20 per cent to US \$16 billion. The surplus in cross-border tourism amounted to US \$13.4 billion or more than 5 per cent of GDP. The depreciation of the Turkish lira against the euro and the booming Russian economy boosted travel revenues from Germany and Russia.

*Transfers and factor incomes:* The surplus of transfers – particularly worker remittances – lost some of its relevance in absolute terms as well as a percentage of GDP. In 2004 the surplus was merely US \$1.1 billion. In former times worker remittances had played a much larger role in Turkey's current account balance.<sup>9</sup>

<sup>8</sup> Serhan Cevik: Turkey: What's Brad Pitt Got to Do with the Current Account, 2004, <http://www.morganstanley.com/GEFdata/digests/20040519-wed.html> [19.05.2004]; CBRT: Balance of Payments Developments in 2004, 2005, <http://www.tcmb.gov.tr/yeni/announce/2005/bp2004.htm> [09.02.2005]; OECD, op. cit.

<sup>9</sup> Thomas Straubhaar: The Determinants of Workers' Remittances: The Case of Turkey, in: *Weltwirtschaftliches Archiv*, Vol. 122, 1986, pp. 728-740.

<sup>7</sup> OECD, op. cit.

### The Current and Capital Account

Due to the principles of double-entry bookkeeping, in an aggregated balance of payments the current account balance equals (in absolute terms) the capital account balance, which includes the reserve assets and net errors and omissions ( $KX = \text{capital exports}$  and  $KM = \text{capital imports}$ ).

$$(2) \quad CA = X - M + r^*B_{t-1}^f = KX - KM$$

A current account deficit ( $X < M + r^*B_{t-1}^f$ ) always goes along with a capital account surplus ( $KM > KX$ ). A country that imports more goods and services (including net factor income) than it exports is a net importer of capital, i.e. capital inflows outweigh capital outflows. It therefore depends on the circumstances whether the current account or the capital account adequately explains the external situation of an economy.

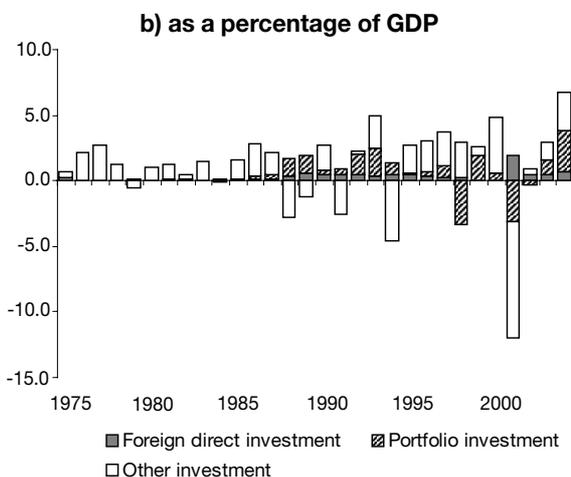
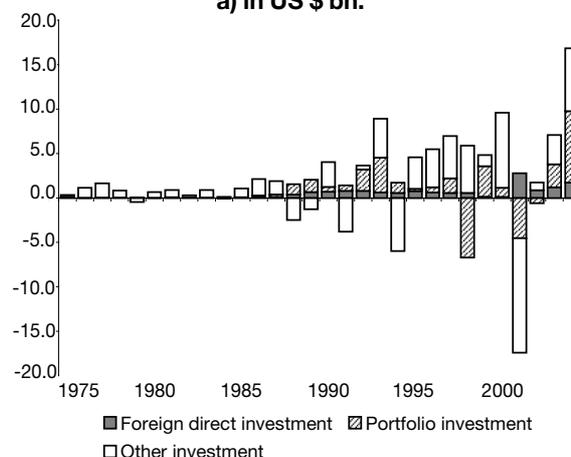
Figure 4 shows the extent to which Turkey's current account and capital account balances correspond in US dollars and as a percentage of GDP. Particularly in recent years there have been significant discrepancies and relatively high values for net errors and omissions. This statistical discrepancy amounted to more than 60 per cent of the current account balance in 2003, in 2004 it was still 20 per cent. One reason for this is the fact that information on balance of payments transactions are collected from different sources. In some countries net errors and omissions reflect statistical problems in keeping track of modern and sophisticated financial transactions.<sup>10</sup> Sometimes it mirrors capital flight. According to the Turkish data a large part of the current account transactions were not offset in parts of the capital account. Obviously this may signal an underestimation of foreign direct investment.<sup>11</sup>

The structure of the capital account (Figure 5) reveals that foreign direct investment has not yet played a significant role in Turkey. The bulk of the Turkish capital transactions took place in the form of portfolio and other investment.<sup>12</sup> The balance of portfolio investment, mainly government debt securities, was in surplus recently. In 2004, net capital inflow amounted to 3.2 per cent of GDP, while outflows lay above 3 per cent between 1998 and 2001. Other investment, mostly credits, recently showed the largest balances for the last 30 years. In most years there were surpluses, i.e. net capital inflows. But the less frequent deficits were large also. Particularly in 2001, the deficit amounted

<sup>10</sup> Philip Lane, Gian Maria Milesi-Ferretti: The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries, IMF Working Paper, WP/99/115, August 1999; Paul R. Krugman, Maurice Obstfeld: International Economics. Theory and Policy, 4th ed., Reading MA et al. 1997; Ansgar Belke, op. cit.

<sup>11</sup> Serhan Cevik: Turkey: What's Brad ... , op. cit.

**Figure 5**  
**Structure of the Turkish Capital Account**  
**a) in US \$ bn.**



Capital account balances without currency reserves. Other investment: particularly state and banks.

Sources: CBRT; own calculation.

to almost \$13 billion or 9 per cent of GDP. During the crisis of 2001 huge capital outflows took place.<sup>13</sup>

There is a dispute whether international capital inflows were positive or negative for growth and development in Turkey.<sup>14</sup> On the one hand, capital inflows helped to close a savings deficit. In general

<sup>12</sup> For a survey of Turkey's long-run capital transactions see Hakan Berument, N. Nergiz Dincer: Do Capital Flows Improve Macroeconomic Performance in Emerging Markets? The Turkish Experience, in: Emerging Markets Finance and Trade, Vol. 40, No. 4, 2004, pp. 20-32; Sübidey Togan, Hasan Ersel: Foreign Exchange Regime, the Real Exchange Rate and Current Account Sustainability: The Case of Turkey, ZEI Working Paper, B 17, Bonn 2004; Yılmaz Akçoraoglu: International Capital Movements, External Imbalances and Economic Growth: The Case of Turkey, in: Yapi Kredi Economic Review, Vol. 11, No. 2, December, 2000, pp. 21-36.

<sup>13</sup> Fatih Özatay, Güven Sak: Banking Sector Fragility and Turkey's 2000-01 Financial Crisis, in: Brookings Trade Forum, 2002, pp. 121-172.

a lack of domestic savings to finance investment can be compensated by inflows of international capital. That enlarges the volume of investment and thus enhances the growth potential of a country. On the other hand, international capital flows may trigger balance of payments crises. The liberalisation of capital transactions has often steered capital into emerging markets resulting in current account deficits. Some of these countries then depreciated their currency – or raised depreciation expectations – which triggered capital outflows and a balance of payments crisis. It must be taken into account, however, that such capital outflows were not the predominant cause of balance of payments problems, but rather a reaction to fundamental problems of a country – e.g. excessive public debt or high inflation.<sup>15</sup>

Up to now foreign direct investment does not play an important role in the Turkish capital account surpluses. While global foreign direct investment surged, Turkish inflows and outflows of cross-border investment did not keep pace. Particularly in comparison with the new member states of the European Union Turkey performed badly.<sup>16</sup> During the 1990s Turkey attracted foreign investment inflows of only US \$800 million per year on average. At the same time Turkish investment abroad amounted to only US \$160 million annually. Only in recent years has Turkish cross-border investment gained momentum. The volume of inflows ranged from 1 to 3 billion US dollars. In 2004, it reached \$2.5 billion. However, excluding 2001, foreign investment inflows amounted to less than 4 per cent of gross fixed investment in Turkey. Turkey's failure to attract international investment capital has been the subject of many studies.<sup>17</sup> They find a number of economic and political reasons for Turkey's poor investment performance: red tape, government in-

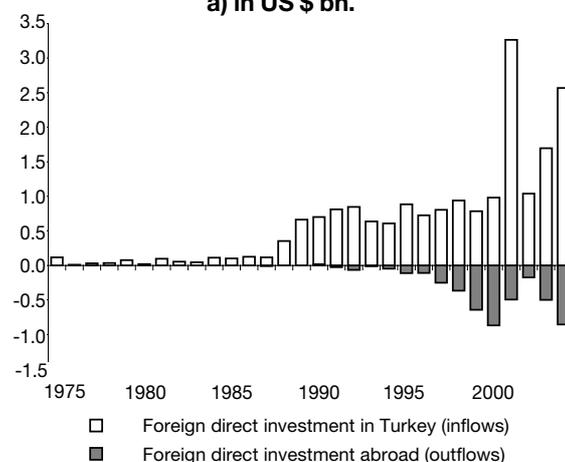
<sup>14</sup> Hakan Berument, N. Nergiz Dincer, op. cit.; C. Emre Alper, Ismail Saglam: The Transmission of a sudden capital outflow: Evidence from Turkey, in: Eastern European Economics, Vol. 39, No. 2, March/April, 2001, pp. 29-48; Alpaslan Akçoraoglu, op. cit.

<sup>15</sup> OECD, op. cit.; Sübidey Togan, Hasan Ersel, op. cit.; Gülsün Gürkan Yay, Turan Yay, Hüseyin Taştan: The impact of budget deficits on output and inflation in Turkey during the period 1967-1999, in: Yapi Kredi Economic Review, Vol. 13, No. 2, 2002, pp. 55-67; Erdal Karagöl: Debt reduction versus domestic policies in Turkey, in: Yapi Kredi Economic Review, Vol. 13, No. 1, June 2002, pp. 3-14; Harry Flam, op. cit.; Yilmaz Akyüz, Korkut Boratav, op. cit. For an analysis of the role of the Turkish banking system see Fatih Özatay, Güven Sak, op. cit.

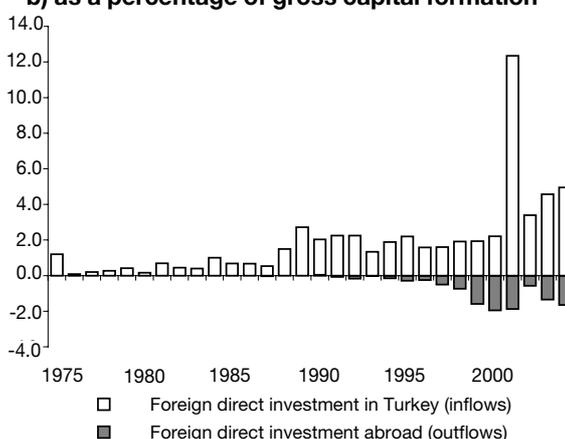
<sup>16</sup> OECD, op. cit.; Foreign Investment Advisory Service (FIAS): Turkey. A Diagnostic study of the foreign direct investment environment, The World Bank, Washington DC 2001; Asim Erkilik: A comparative analysis of inward and outward FDI in Turkey, in: Transnational Corporations, Vol. 12, No. 3, 2003, pp. 79-105.

<sup>17</sup> FIAS, op. cit.; TÜSIAD / YASED: FDI Attractiveness to Turkey, A comparative Analysis, February, 2004; Asim Erkilik, op. cit.; Suleyman Tulug Ok: What Drives Foreign Direct Investment into Emerging Markets? Evidence from Turkey, in: Emerging Markets Finance and Trade, Vol. 40, No. 4, 2004, pp. 101-114.

**Figure 6**  
**Foreign Direct Investment in and by Turkey**  
**a) in US \$ bn.**



**b) as a percentage of gross capital formation**



Sources: CBRT; own calculation.

terventions, legal and administrative uncertainties, political instability, the size of the informal economy, high inflation and an insufficient guarantee of property rights.

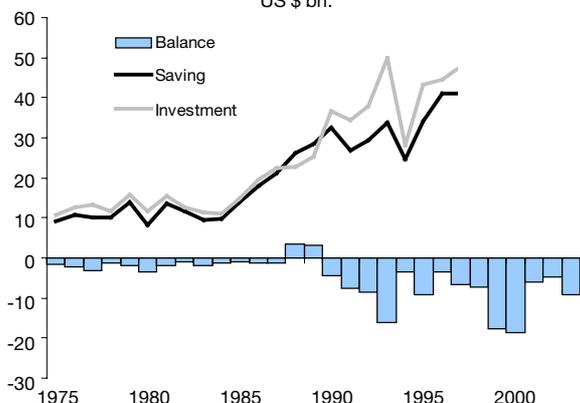
### Current Account, Saving and Investment

The current account balance portrays not only the external situation of an economy but also its domestic economic situation and development. The following national accounts identities (3 to 6) lead to a central equation:

(3)  $Q = C + I + G + X - M$ . Identity (3) describes the expenditure side of GDP, where Q stands for GDP, C for consumption, I for private and public investment, G for government consumption, X for exports of goods and services and M for imports of goods and services (M is subtracted because it is already included in C, I, G and X).

**Figure 7**  
**Savings and Investment in Turkey**

Gross savings, gross investment and savings-investment balance in US \$ bn.



Sources: OECD; own calculations

(4)  $Y = Q + r^*B_{t-1}^f$ .  $Y$  stands for gross national product (GNP) and equals GDP ( $Q$ ) plus the balance of cross-border factor incomes ( $r^*B_{t-1}^f$ ).

(5)  $YD = Y + TR - T$ . The disposable income of the entire economy ( $YD$ ) consists of gross national income plus transfers ( $TR$ ) minus the sum of direct taxes without subsidies ( $T$ ).

(6)  $YD = C + S$ .  $YD$  can be used for consumption ( $C$ ) or savings ( $S$ ).

From this follows:

$$(7) \quad (S - I) + (T - G - TR) = (X - M + r^*B_{t-1}^f) = CA$$

Equation (7) is a central identity to interpret current account balances. A current account balance results from the difference between national savings and national investment ( $S - I$ ) and from a part of the government budget balance ( $T - G - TR$ ). Because of capital inflows, i.e. a current account deficit, national savings can diverge from national investment and government expenditure from public revenues.

Figure 7 shows the development of gross investment and gross savings in Turkey between 1975 and 2003. Although both items are highly volatile they show a relatively high degree of synchronisation. Periods of declining savings were also periods of shrinking investment. But except in 1988 and 1989 national savings were insufficient to finance national investment. In 1993, 1999 and 2000 the savings gap was about US \$16 to 18 billion. A part of the capital account surplus or the corresponding current account deficit helped to finance a part of Turkey's investment in the past.<sup>18</sup> The pattern is different when looking at two subpe-

<sup>18</sup> Jülide Yıldırim: Saving-Investment correlation: evidence from Turkey, in: *Yapi Kredi Economic Review*, Vol. 12, No. 1, June, 2001, pp. 35-42.

riods: between 1990 and 2003 the investment ratio amounted up 23.4 per cent and was on average higher than between 1975 and 1989 (21.3 per cent), but the savings ratio declined from 19.4 per cent (1975/1989) to 18.5 per cent (1990/2003).

### Current Account and Expenditure

The sum of government consumption ( $G$ ), private consumption ( $C$ ) and private and public investment ( $I$ ) is also called absorption or expenditure ( $A$ ):<sup>19</sup>

$$(8) \quad A = G + I + C$$

Together with the central identity (7) and equations (1) and (4) it follows:

$$(9) \quad CA = Y - A$$

$$(10) \quad PCA = Q - A$$

A current account deficit ( $X - M + r^*B_{t-1}^f < 0$ ) emerges when an economy absorbs more than it earns ( $Y$ ). A primary current account deficit ( $X - M < 0$ ) results when a country absorbs more than it produces ( $Q$ ). Figure 8 shows the development of expenditure in Turkey.

When a country's expenditure exceeds its income ( $Y$ ) or production ( $Q$ ) it presumably lives beyond its means. But such an assessment is not without value judgements.<sup>20</sup> A more negative assessment seems obvious if expenditure is driven predominantly by private or public consumption ( $C$  or  $G$ ), a more positive view if expenditure is mostly determined by private and public investment. The appropriateness may depend on the intertemporal effects. When a current account deficit is used to finance investment, the capital stock of the economy expands. This in turn increases the capital-labour ratio, productivity and the production potential. As a result of such current account deficits foreign debt can be served more easily than if capital imports are used for public or private consumption.

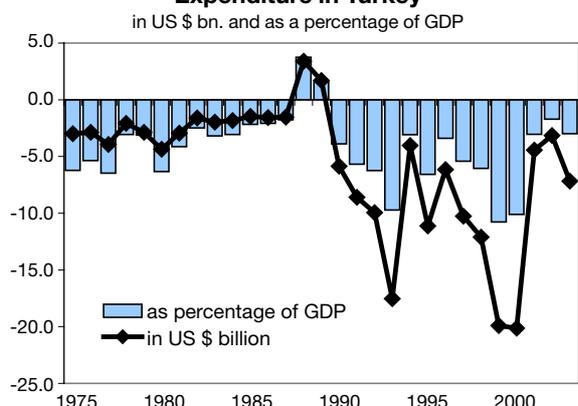
According to Table 1 real government consumption showed the highest growth rate during the period 1975 to 2003, on average 4.4 per cent per annum. Real investment growth was lower than that of GDP – between 1975 and 1985 and between 1995 and 2001 it even shrunk on average. Private consumption increased too but less than GDP. Thus the expansive Turkish expenditure can mainly be explained by rising public consumption.<sup>21</sup> Capital formation does not seem to have been the main driving force behind

<sup>19</sup> Jeffrey Sachs, Felipe Larrain, op. cit.

<sup>20</sup> Renate Ohr: Expansion of the Public Sector, the Current Account and the Exchange Rate, in: *INTERECONOMICS*, Vol. 20, November/December, 1985, pp. 296-300.

<sup>21</sup> Ferda Halıcıoğlu: Testing Wagner's law for Turkey, 1960–2000, in: *Review Middle East Economics Finance*, August, Vol. 1, No. 2, 2003, pp. 129-140, shows that government expenditure as a percentage of GDP increased in the long term.

**Figure 8**  
**Expenditure in Turkey**



Sources: OECD; own calculations.

growing expenditure in comparison to income or production. But the picture has changed recently. From 2001 to 2003, investment was the most important growth accelerator in Turkey. Real investment surged by nearly 30 per cent while government consumption barely increased. This suggests a more positive assessment for recent years.

#### Current Account and Government Budget

The central equation (7) already showed an important relationship between a current account balance and the government budget balance. In most cases – albeit not necessarily – a high public budget deficit goes along with a current account deficit.

$$(7) \quad CA = (X - M + r^*B_{t-1}^f) = (S - I) + (T - G - TR)$$

The equation does not directly reveal the complete impact of the public deficit on the current account balance.

- S and I include private as well as public savings and investment:  $S = S^g + S^p$  and  $I = I^g + I^p$
- Similarly, cross-border factor incomes ( $r^*B_{t-1}^f$ ) contain private and public factor incomes ( $r^*B_{t-1}^g$ )
- Finally,  $(T - G - TR)$  does not cover the government budget balance (FS) completely, because

$$(11) \quad FS = TK - G - TR - I^g + r^*B_{t-1}^g$$

The complete budget balance thus takes into account public investment, government interest payments on public debt (or interest revenues from public wealth) as well as all tax revenues, not only those from direct taxes. A budget deficit therefore also arises when  $r^*B_{t-1}^g < 0$ . The current budget balance (flows) determines the changes of the public wealth status (stock). If a government debt has already piled up, current budget deficits will increase the public debt burden. The public wealth or debt position is defined

**Table 1**  
**Expenditure Side of Turkey's Real GDP**

	Average annual change in per cent			
	GDP	Private consumption	Government consumption	Investment
1975/2003	3.8	3.5	4.4	3.3
1975/1985	3.6	4.7	5.3	-1.3
1985/1995	4.4	3.2	4.2	9.1
1995/2003	3.2	2.4	3.4	2.4
1995/2001	1.9	1.8	4.1	-5.0
2001/2003	6.9	4.3	1.4	27.9

Sources: OECD; own calculations.

as (with  $B^{fg}$  = government external wealth position and  $B^{dg}$  = governmental internal wealth position):

$$(12) \quad B^g = B^{fg} + B^{dg}$$

and:

$$(13) \quad B_t^g = B_{t-1}^g + r^*B_{t-1}^g + TK - G - TR - I^g$$

Together with equation (11) we have:

$$(14) \quad FS = B_t^g - B_{t-1}^g$$

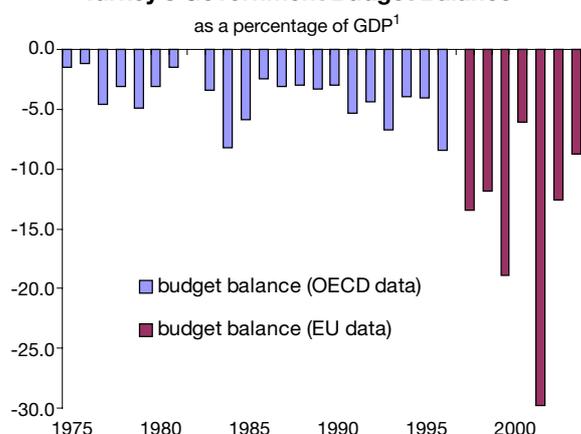
Figure 9 shows Turkey's government budget balance as a percentage of GDP. Data for the period 1975 to 2003 stem from different sources (OECD and EU). No data is available for 1982.<sup>22</sup> The overall picture shows rising government expenditure and permanent budget deficits<sup>23</sup> which peaked in 2001 when the current budget deficit amounted to almost 30 per cent of GDP (Table 2). Recently Turkey has fostered the consolidation of its budget, however, with the support of an International Monetary Fund stabilisation programme. The recent primary budget surplus – excluding 2001 – is proof of a remarkable government discipline. The difference between the complete budget balance and the primary balance are interest payments (revenue) on public debt (wealth). Table 2 shows that the primary budget balance was mostly positive and in recent years also higher than the aggregate budget balance in absolute terms.

Thus the high debt level – in 2001 public debt even surpassed the current GDP – and, correspondingly, high interest payments are an important determinant of Turkey's current account deficit. Almost 70 per cent of Turkey's public debt was financed by foreign capital in 2004.<sup>24</sup> External indebtedness of more than US \$150 billion and external public debt amounted to 50 per cent of GDP in 2004. The central equation (7) and equation (11) show how public indebtedness to foreign

<sup>22</sup> OECD data are only available up to 2001. EU data have been used because of their larger volume and higher relevance to the current situation, but there are no data before 1997. According to the OECD data the budget deficit is lower during the overlapping period.

<sup>23</sup> OECD, op. cit.; Ferda Halicioğlu, op. cit.

**Figure 9**  
**Turkey's Government Budget Balance**



<sup>1</sup> Data for 1982 not available.

Sources: OECD; EU; own calculations.

and domestic creditors ( $B^{fg} + B^{dg}$ ) and the corresponding debt services ( $r \cdot B_{t-1}^{fg}$ ) contribute to a chronic current account deficit.<sup>25</sup>

#### Current Account and Net External Wealth

The current account balance also determines the net external wealth position of a country ( $B^f$ ). If  $B^f > 0$  ( $B^f < 0$ ), then an economy is a net creditor (net debtor) to foreign countries. The annual current account or capital account balance therefore reflects the changes in the external wealth position from the previous year:

$$(15) \quad CA = B_t^f - B_{t-1}^f$$

Thus the net external position (stock) is the sum of all current account balances (flows) in the past:

$$(16) \quad B_t^f = B_0^f + CA_1 + CA_2 + \dots + CA_t$$

Although capital flows are monitored quite closely there is a lack of data on the corresponding national stock of external assets and liabilities. A preliminary estimate of the net external position of an economy can be obtained by adding the current account or capital account balances. But this method of calculation has considerable limitations.<sup>26</sup> A comprehensive analysis has to take capital flight, debt reduction schemes, exchange-rate fluctuations and other valuation issues into account. In most cases the item "net errors and omissions" bundles such otherwise unre-

<sup>24</sup> Tevfik Aksoy: Turkey in Pictures, in: Deutsche Bank Global Markets and Research, London, 12 January 2004; CBRT, op. cit. For an analysis of public indebtedness in Turkey see K. Azim Özdemir: Public Debt in Turkey, The Central Bank of the Republic of Turkey, Research Department Working Paper, No. 04/11, Ankara 2004.

<sup>25</sup> Erdal Karagöl, op. cit.

<sup>26</sup> Philip Lane, Gian Maria Milesi-Ferretti, op. cit.; Maurice Obstfeld: External Adjustment, in: Review of World Economics, Vol. 140, No. 4, 2004, pp. 541-568.

**Table 2**  
**Government Budget Indicators for Turkey**

	as a percentage of GDP			
	Budget balance	Primary budget balance	Interest payments	Debt stock
1997	-13.4	1.5	14.9	52.7
1998	-11.9	1.4	13.3	50.2
1999	-18.9	2.8	21.7	67.4
2000	-6.1	7.9	14.0	57.4
2001	-29.8	-2.7	27.1	105.2
2002	-12.6	7.0	19.6	94.3
2003	-8.8	9.6	18.4	87.4

Source: EU.

corded transactions.<sup>27</sup> Acknowledging these limitations, Figure 10 shows the external position of Turkey after 1975 as the simple sum of the current account balance and the capital account balance. According to this rough measurement Turkey piled up net external liabilities of around US \$60 billion between 1975 and 2004. However, the external position ( $B_{t-1}^f$ ) of an economy not only emerges from previous current account balances – in the case of Turkey as a result of its deficits. According to equation (1) the creditor or debtor position also determines the present and future current account balances via interest payments or revenues ( $r \cdot B_{t-1}^f$ ). Current account balances may be self-reinforcing.

#### Current Account and the Intertemporal Budget Constraint

Equations (15) and (16) showed that a current account balance indicates a change in the external position of a country. According to equation (14) the current government budget balance changes the wealth position of the state. A current account deficit – particularly in combination with a government budget deficit – can impact an economy in the future. A simple two-period model shows that in the long run a country has to produce what it consumes. In such a model the external position is zero in the start and end period ( $B_0^f = 0$  and  $B_2^f = 0$ ) and there is no investment in the end period ( $I_2 = 0$ ). Together with equation (15) it follows:

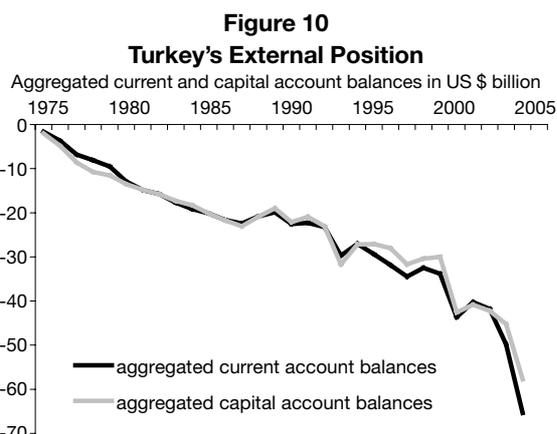
$$(17) \quad CA_1 = B_1^f - B_0^f = B_1^f$$

$$(18) \quad CA_2 = B_2^f - B_1^f = -B_1^f$$

$$(19) \quad CA_1 + CA_2 = 0$$

A current account deficit in one period or in one generation requires a current account surplus in the other period or generation. Together with equation (10) it follows:

<sup>27</sup> Philip Lane, Gian Maria Milesi-Ferretti, op. cit.



Sources: CBRT; own calculations.

$$(20) \quad B_1^f - B_0^f = CA_1 = PCA_1 + r^*B_0^f = Q_1 - A_1 + r^*B_0^f$$

$$(21) \quad CA_1 = B_1^f = Q_1 - A_1$$

$$(22) \quad B_2^f - B_1^f = Q_2 - A_2 + r^*B_1^f$$

$$(23) \quad B_2^f = (1+r)^*B_1^f + Q_2 - A_2$$

Together with  $A = C + G + I$  and  $C^{pg} = C + G$ ,  $B_2^f = 0$  and  $I_2 = 0$  it follows:

$$(24) \quad 0 = (1+r)^*(Q_1 - C_1^{pg} - I_1) + Q_2 - C_2^{pg}$$

Therefore:

$$(25) \quad C_1^{pg} + C_2^{pg}/(1+r) = (Q_1 - I_1) + Q_2/(1+r)$$

And from  $PCA_1 = Q_1 - A_1 = Q_1 - C_1^{pg} - I_1$  and  $PCA_2 = Q_2 - A_2 = Q_2 - C_2^{pg}$  follows

$$(26) \quad PCA_1 + PCA_2/(1+r) = 0$$

Equation (24) shows that in the long run countries must produce their public and private consumption by their own means. The present value of public and private consumption has to equal the present value of production minus investment. According to equation (26) the present value of the primary current account, which only includes goods transactions and not cross-border factor incomes, is zero. A multi-period model in principle offers the same results.<sup>28</sup> In the case of net liabilities as a result of previous current account deficits it follows that:

$$(27) \quad C_1 + C_2/(1+r) + \dots = (1+r)^*B_0^f + (Q_1 - I_1) + (Q_2 - I_2) + \dots$$

Together with equation (12) and some rearranging it follows that:

$$(28) \quad (1+r)^*B_0^f = PCA_1 + PCA_2/(1+r) + \dots$$

If a country is already a net debtor in period  $t=1$  with liabilities of  $B_0^f$ , then it has to achieve a primary current

<sup>28</sup> Michael Burda, Charles Wyplosz: *Macroeconomics*, Oxford 1993; Jeffrey Sachs, Felipe Larrain, op. cit.

account surplus in the future equal to the present value of the initial debt. The present value of all primary current account balances – in single years deficits or surpluses can emerge – has to equal the initial net external position. In this case future production  $Q$  has to exceed future expenditure  $E$ . Therefore the intertemporal flows of goods and not the factor income flows are relevant for the intertemporal budget constraint of an economy. The debtor country has to realise a future surplus in the primary current account even if it does not pay back its external debt. If the initial debt position persists, surpluses on the primary current account are needed to pay interest on external debt.

### Concluding Remarks

Recently Turkey's current account deficit reflected an investment boom and the recovery of consumption. Expenditure, capital imports and the corresponding current account deficit since 2001 cannot be explained by an expansive fiscal policy. Turkey even realised a primary surplus in its government budget. Moreover, goods exports increased remarkably. Thus the expansion of the current account deficit is not a sign of diminishing competitiveness.<sup>29</sup> Turkey succeeded in the course of 2004 in having a single digit inflation rate – after decades of high inflation. This success in fighting high inflation and the economic recovery are the background for the appreciation of the Turkish lira against some currencies – particularly the US dollar. A depreciation of the Turkish lira is not an option to diminish the current account deficit. Moreover, a depreciation might trigger inflation and uncertainty.

Turkey's current account deficit and its corresponding capital account surplus can be viewed more positively today. But it is important for Turkey to restructure its capital inflows towards foreign direct investment. This in turn means a lower share of portfolio investment, particularly in financing government deficits. Capital inflows are generally not negative for economic development. Economic growth in Turkey during the nineties was reinforced by foreign capital, although this view is not generally supported.<sup>30</sup> The structure of capital inflows is of utmost importance. Stable and sustained capital inflows are decisive to avoid the boom and bust cycles of the past. Therefore liberalisation policies and further enhancement of the general investment conditions are crucial in Turkey's bid for EU membership.

<sup>29</sup> Serhan Cevik: *Turkey: Fear Mongers ...*, op. cit.

<sup>30</sup> Hakan Berument, N. Nergiz Dincer, op. cit.; F. Gül Biçer, Alp Erinċ Yeldan: *Patterns of Financial Capital Flows and Accumulation in the Post-1990 Turkish Economy*, in: *Canadian Journal of Development Studies*, Vol. 24, No. 2, 2003, pp. 249-265.