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A Quarterly Forecast of U.S. Trade in Services and the Current Account, 2000-2003*

Prepared by

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Summary of Forecast***

We forecast that the services trade surplus, which declined from 1997 to 1998 and edged upward in 1999 and in the beginning of this year, will decline again in 2001 before recovering in 2002 and 2003. That is, from a level of $80.6 billion in 1999, we forecast that the services trade surplus will be $80.8 billion in 2000, slip to $75.0 billion in 2001, and then rise to $81.4 in 2002 and reach a new surplus high of $93.1 billion in 2003. Throughout this period, both exports and imports individually are forecast to grow, with imports growing faster than exports over the next several quarters but with exports growing as fast as imports through 2003. This same pattern is forecast for each of the four separate categories of services, with some variation across categories. Imports grow especially fast over the next two years for the categories of passenger fares and other private services.

We forecast that the deficit on trade in goods will rise from $345.6 billion in 1999 to $454.4 billion in 2000, and $616.3 billion in 2003. This reflects primarily goods imports rising more rapidly than exports due to the continued expansion of the U.S. economy compared to its major trading partners. The deficit balance on goods and services together is thus forecast to rise from $265.0 billion in 1999 to $373.6 billion in 2000 and to $523.2 billion in 2003. The negative balance on factor incomes is forecast to fall from 1999 to 2001 and then to rise in the following years. Taking this into account along with goods and services, plus net unilateral transfers, we forecast that the overall U.S. current account deficit will increase from $331.5 billion in 1999 to $435.2 billion in 2000, and reach $607.4 billion by the end of 2003.

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Introduction

Trade in services[2] continues to be a major part of U.S. participation in the global economy. Since the mid-1980s, the dollar value of service imports has, on average, equaled more than 21 percent of the value of goods imports, while service exports have, on average, been 40 percent as large as goods exports. In calendar 1999, U.S. service exports, as measured in the balance of payments accounts, totaled $271.9 billion compared with $191.3 in service imports, yielding a U.S. trade surplus in services of $80.6 billion.[3]

The U.S. has been running a positive balance in service trade since 1974. In the late 1970s, the service balance ran in the range of $4-$5 billion per year; during the 1980s, the annual service surplus was generally in the $12-$15 billion range; and by the late 1980s, service trade was producing $20-$30 billion surpluses. The 1990s saw marked growth in service trade, with export growth outpacing import growth through most of the decade, to generate service trade surpluses that rose sharply through 1997, as follows (annually, in billions of $s, transaction-based):

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
$30.2	45.8	60.4	63.7	69.2	77.8	89.2	90.7	80.0	80.6

The economic and financial problems in the Asia-Pacific region took a toll on U.S. exports. This was especially true for goods exports, but service exports were impacted as well. By mid-1997, service exports had grown to $261 billion at an annual rate, up from $235 billion a year earlier. At that point, service exports stalled, and remained essentially flat in the range of $255-$267 billion from the second quarter of 1997 through the fourth quarter of 1998. Only in 1999 did service exports resume their growth, reaching an annual rate of $293 billion in the second quarter of 2000. Service imports, on the other hand continued to rise throughout 1998, with the result that the balance of trade in services declined to an annual rate of under $73 billion in 1998.3. The balance fluctuated after that, reaching just under $84 billion as of the latest quarter, 2000.2, for which we have data.

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[2]In this document, the term *services* refers exclusively to the services portion of what is reported as trade in goods and services. It does not include factor income, interest income, and the like that are part of the current account.

[3]Balance of payments figures are transaction based and represent actual international payments for services. NIPA-based figures, used for National Income and Product Accounting purposes, differ from actual transactions primarily by including imputed values for financial services rendered in kind and gross two-way parent-affiliate transactions. NIPA figures are conceptually more compatible with other variables of the forecasting model and have therefore been used here for that purpose. We report transaction figures, however, and an adjusted transactions-based forecast, for ease of comparison with the more familiar numbers that are reported in the press.

Inputs to the Forecast of Trade in Services

The outlook for service trade over the next several years will depend most heavily on three key factors: the strength of the U.S. economy, as measured by the growth of U.S. real GDP; the growth rate of America's major trading partners; and the international value of the U.S. dollar. These and other needed inputs are processed through our econometric model of the "trade in services" sector of the economy to produce the forecast.[4]

The model uses a trade-weighted average of real GDP in five countries to represent economic activity among our major trading partners. The five countries defining our "rest-of-world" for this purpose are Canada, Mexico, Japan, U.K., and Germany. The exchange rate, or value of the U.S. dollar, that is used in the model is the index of major currencies published by the Federal Reserve Board. It is calculated as a trade-weighted average of the value of the U.S. dollar against the currencies of Canada, the Euro-11, Japan, the U.K., Switzerland, Australia, and Sweden.

For purposes of this forecast, we used input values generated in the October 2000 economic forecast published by the Research Seminar in Quantitative Economics (RSQE) of the University of Michigan. Table 1 contains annual data on the three variables just discussed, taken from the RSQE forecast.

To characterize these inputs:

- The U.S. economy is forecast to continue expanding over the next three-plus years, but, not quite at the pace of the previous two years, nor certainly at the unsustainable rate that it has expanded so far this year. We forecast GDP growth to slow for the remainder of this year (though still achieving an expansion of 5.3% for the year), then to continue growing in the 3-4% range over the next three years.

- Economic conditions abroad are continuing to improve, and we expect growth in our major trading partners to approach, but not equal, that of the U.S. economy. During 2000 the trade-weighted growth rate of our five major trading partners (Canada, Mexico, U.K, Germany, and Japan) is on track to exceed 4 percent, and we expect that growth, like that of the United States, to ease back to just over 3 percent during the next three years.

- The U.S. dollar has appreciated during most of the last five years, 1996 into 2000, as other countries ran into economic and financial difficulties and international investors turned increasingly to the United States, and as the U.S. economy continued to outpace others. As other countries' recoveries continue, and as the U.S. current account deficit continues to grow, we now expect the value of the dollar to decline. We are forecasting that the trade-weighted value of the U.S. dollar will remain almost level from it current peak through 2001, declining just 0.3% in 2001. But then we forecast that it will fall at a 3-4% rate during 2002-3.

The Forecast of Trade in Total Services

Table 2 contains the forecast of total service trade for calendar years 2000-2003, showing transactions-based service exports, service imports, and the balance of trade in services. The table

[4] The Trade in Services model was re-estimated for this forecast, using revised data that were issued by the Department of Commerce in August 2000.

shows the data both as levels in billions of (current) dollars, and as year-to-year percent changes. For perspective, the table contains data for 1997-1999 as well.

The quarterly forecasts of total service trade are graphed in Figure 1, starting with actual first-and-second-quarter-2000 values of net exports, exports, and imports of services. Like the annual values in Table 2, these are in current dollars and include some slight upward trend due to inflation, but most of the increase shown is in fact real.

As noted above, for calendar 1998 service exports throttled back to a less than two percent growth rate, compared with the more than eight percent growth rates in the two previous years. The recovery of economies abroad produced a partial recovery in service exports starting already in 1999 that has continued into 2000. Service exports are forecast to expand by eight percent this year, more than five percent next year, and then renew their growth at double-digit rates in 2002 and 2003.

Growth of U.S. service imports slowed to 4.7 percent in 1999, but they resumed their double-digit growth rates this year. We forecast service imports to continue growing at 10-11 percent per year throughout 2001-2003.

As a result, with exports of services trailing somewhat behind imports for the next two years, the large surplus that still remains will decline somewhat in 2001. It will resume its expansion thereafter, however, reaching a new high of $93.1 billion in 2003.

In summary, our forecast of total service trade suggests that the reduced growth in total service trade, both gross and net, that was observed in 1998-9 is now history, and that we are largely back on track with growth rates similar to what we were accustomed to earlier in the 1990s.

The Forecast of Trade in Services Sectors

Our model includes separate forecasting equations for four subcategories of service trade:

- Travel – mostly tourist expenditures
- Passenger Fares – mostly passenger air transportation
- Transportation – other than passenger transportation
- Other Private Services – includes education, financial services, insurance, telecommunications, and business, professional and technical services

Prices and quantities of service exports and imports were forecast for each of these service categories separately, the results then summed and scaled to obtain the forecast for total services reported above. Thus, the forecasts for total trade in services that we have just discussed were built up from our forecasts of trade in these four sectors, to which we now turn.

Tables 3-6 contain the forecasts on an annual basis for each of these categories, using the same format as Table 2. Figures 2-5 present graphs of the corresponding quarterly forecasts for each category.

As shown in Table 3 and Figure 2, the United States is a net exporter of travel services, which consist mostly of expenditures by foreign tourists in the U.S. (exports) and by U.S. tourists abroad (imports). The slowdown abroad reduced our exports in 1998, while our imports continued to grow, albeit at a slower rate in 1999. Our forecast shows both of these continuing to grow in 2000 and after, with a slight temporary slowdown of that growth in 2001. Exports are forecast to grow more slowly than imports in 2000 and 2001, so that net exports in this period hardly move. But we expect their growth rate to increase during the subsequent two years while growth of imports continues at a more or less constant rate. As a result, we see the trade surplus in the category recovering from its losses of 1998 and 1999, and surpassing its previous peak by 2003.

Exports of passenger fares, in Table 4 and Figure 3, also slowed in 1998-9, while imports continued to expand, causing the previous small trade surplus in passenger fares to become negative in 1999. Growth of both exports and imports has resumed in 2000, with imports growing much faster, and we expect this trend to continue throughout most of the coming three years. That is, both imports and exports of passenger fares will grow more rapidly each year, with imports growing faster than exports and the trade deficit increasing over time. By 2003, however, both are forecast to grow in excess of thirteen percent, with not much further deterioration of the trade balance.

Trade in transportation services (Table 5 and Figure 4) was already growing only rather slowly if at all (compared to other categories of services) in 1996-7. Exports of transportation services then fell absolutely in 1998 due to the Asian crisis. Both exports and imports picked up substantially in 1999, and have continued that growth in 2000 at rates above what were seen in the last few years. However, we forecast that the growth of both will then return to their historically lower rates in 2001-3, with exports growing slightly faster than imports in the last two of these years. The trade balance in transportation services has been negative but small for some time, and we forecast it to remain roughly stationary.

Our last category of services, other private services, is reported in Table 6 and Figure 5. Here both exports and imports have grown very rapidly in recent years, and the problems of 1998 only reduced the growth of exports from double-digit to single-digit rates in 1998 and 1999. Growth of imports remained high in 1998, but turned negative in 1999. Our forecast shows both growing in excess of ten percent in 2000, followed by growth of 15-17 percent in imports in the next three years. We expect export growth to increase much less in those years, but because exports are already so much larger than imports in this category, the large trade surplus recedes only slightly in 2001 and then resumes its growth.

Together, these results suggest very few differences across categories in the behavior over time of exports and imports of services. In all four categories, any slowdown that occurred in 1998 has now passed, and all are growing at healthy rates.

Services Trade and the Current Account

To put the services forecasts in perspective, Table 7 reports both historical and forecast values for annual trade in services together with other components of the current account. These include the historical and forecast values (transactions based) of U.S. aggregate exports and imports of goods, factor income receipts and payments, and net unilateral government and private transfers.

In terms of net contributions to the current account, trade in services is the only component that has been consistently positive. The surplus on trade in services was roughly one-third to one-half of the deficit on trade in goods through most of the 1990s, until the Asian crisis caused imports in both goods and services to surge ahead of exports. The forecast shows the surplus in services trade remaining roughly constant over the next two years before picking up speed in 2003, while the deficit in trade in goods continues to grow throughout. The balance on goods and services is therefore forecast to rise from $373.6 billion in 2000 to $523.2 billion in 2003. When the negative balances on factor income receipts and payments and net unilateral transfers are taken into account, the overall current account deficit is forecast to increase from $435.2 billion in 2000 to $607.4 billion in 2003.

Conclusion

Trade in services between the United States and the world has grown rapidly over the last decade and more, with both imports and exports expanding at a steady clip. The Asian crisis cut into this growth to varying degrees in all of the service sectors that we are able to distinguish in the data. Our forecasts consistently indicate, however, that growth of services trade has resumed and that it will continue, at roughly its historical pace, through the next three years.

Table 1
Inputs to the Forecast
Exchange Rates, U.S. and Foreign GDP
Actual and Forecast by RSQE Model, 1997-2003

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Trade-wtd. Value of Dollar 3/73=100	91.2	95.8	94.0	97.6	97.3	93.9	90.1	5.0	-1.8	3.8	-0.3	-3.4	-4.1
U.S. Real GDP 1996$	8159.5	8515.7	8875.8	9343.2	9693.8	10020.7	10364.4	4.4	4.2	5.3	3.8	3.4	3.4
Five-country real GDP 1992=100	113.22	115.74	119.28	124.28	128.22	132.23	136.27	2.2	3.1	4.2	3.2	3.1	3.1

Table 2
Total Services Trade
Actual and Forecast, 1997-2003
Transactions Based[a]
(Billions of Current Dollars)

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Services Trade Balance	90.7	80.0	80.6	80.8	75.0	81.4	93.1	-11.9	0.8	0.3	-7.2	8.5	14.4
Exports	257.2	262.7	271.9	293.7	310.3	341.6	382.3	2.1	3.5	8.0	5.6	10.1	11.9
Imports	166.5	182.7	191.3	212.9	235.3	260.1	289.2	9.7	4.7	11.3	10.5	10.6	11.2

[a]Forecasts were done using NIPA data, then converted for this table to transactions basis by assuming that the ratio of transactions-based exports to NIPA-based exports remains constant over time at the level of 1999.

Table 3
Trade in Travel (Tourist Services)
Actual and Forecast, 1997-2003
(Billions of Current Dollars)

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Services Trade Balance	21.4	14.8	15.6	15.6	14.9	18.5	25.5	-30.9	5.4	0.1	-4.5	24.3	38.1
Exports	73.4	71.3	74.9	80.6	84.3	92.8	105.6	-2.9	5.1	7.6	4.7	10.0	13.7
Imports	52.1	56.5	59.4	65.0	69.5	74.3	80.1	8.5	5.0	9.6	6.9	7.0	7.7

Table 4
Trade in Passenger Fares
Actual and Forecast, 1997-2003
(Billions of Current Dollars)

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Services Trade Balance	2.7	0.1	-1.7	-4.3	-7.3	-9.1	-10.4	-96.3	-1750.0	163.3	66.9	26.0	13.4
Exports	20.9	20.1	19.8	20.1	20.9	23.0	26.1	-3.7	-1.5	1.7	4.2	9.8	13.3
Imports	18.1	20.0	21.4	24.5	28.2	32.1	36.4	10.2	7.3	14.2	15.3	14.0	13.3

Table 5
Trade in Transportation Services
Actual and Forecast, 1997-2003
(Billions of Current Dollars)

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Services Trade Balance	-2.0	-4.8	-7.1	-9.8	-11.2	-11.4	-11.7	140.5	48.9	39.2	13.5	2.0	2.8
Exports	27.0	25.6	27.1	29.3	30.4	32.0	34.1	-5.2	5.7	8.2	3.8	5.2	6.8
Imports	29.0	30.4	34.1	39.1	41.6	43.4	45.9	4.7	12.4	14.6	6.2	4.3	5.7

Table 6
Trade in Other Private Services
Actual and Forecast, 1997-2003
(Billions of Current Dollars)

	Actual			Forecast				Percent Changes					
	1997	1998	1999	2000	2001	2002	2003	1997 -98	1998 -99	1999 -2000	2000 -01	2001 -02	2002 -03
Services Trade Balance	41.2	41.8	49.9	54.9	54.4	57.0	59.8	1.5	19.2	10.0	-0.8	4.8	4.8
Exports	84.5	90.9	96.5	106.9	114.6	127.7	142.5	7.6	6.2	10.7	7.2	11.4	11.6
Imports	43.3	49.1	46.7	52.0	60.2	70.6	82.7	13.4	-4.9	11.5	15.7	17.4	17.2

Table 7
Services Trade and the Current Account
Actual and Forecast, 1990-2003
Transactions Based
(Billions of Current Dollars)

	Actual										Forecast			
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Goods:														
Exports	389.3	416.9	440.4	456.8	502.4	575.9	612.1	679.7	670.3	684.4	779.1	862.3	947.1	1058.0
Imports	498.3	491.0	536.5	589.4	668.6	749.6	803.3	876.4	917.2	1029.9	1233.4	1391.5	1525.3	1674.3
Balance	**-109.0**	**-74.1**	**-96.1**	**-132.6**	**-166.2**	**-173.7**	**-191.3**	**-196.7**	**-246.9**	**-345.6**	**-454.4**	**-529.1**	**-578.2**	**-616.3**
Services:														
Exports	147.8	164.3	176.9	185.9	201.0	219.2	240.0	257.2	262.7	271.9	293.7	310.3	341.6	382.3
Imports	117.7	118.5	116.5	122.3	131.9	141.5	150.9	166.5	182.7	191.3	212.9	235.3	260.1	289.2
Balance	**30.2**	**45.8**	**60.4**	**63.7**	**69.2**	**77.8**	**89.2**	**90.7**	**80.0**	**80.6**	**80.8**	**75.0**	**81.4**	**93.1**
Goods and Services Balance	**-78.9**	**-28.3**	**-35.7**	**-69.0**	**-97.0**	**-95.9**	**-102.1**	**-105.9**	**-166.9**	**-265.0**	**-373.6**	**-454.1**	**-496.8**	**-523.2**
Factor Income:														
Receipts	171.7	149.2	132.1	134.2	165.4	211.5	223.8	257.4	258.5	276.2	343.9	392.4	423.7	453.4
Payments	143.2	125.1	109.1	110.3	148.7	191.0	204.9	251.2	264.7	294.7	357.4	405.5	438.9	474.0
Balance	**28.6**	**24.1**	**23.0**	**23.9**	**16.7**	**20.5**	**18.9**	**6.2**	**-6.2**	**-18.5**	**-13.4**	**-13.0**	**-15.1**	**-20.6**
Transfers:														
Balance	**-26.7**	**10.8**	**-35.0**	**-37.6**	**-38.3**	**-34.1**	**-40.1**	**-40.8**	**-44.0**	**-48.0**	**-48.2**	**-54.0**	**-58.4**	**-63.6**
Current Account Balance	**-77.0**	**6.6**	**-47.7**	**-82.7**	**-118.6**	**-109.5**	**-123.3**	**-140.5**	**-217.2**	**-331.5**	**-435.2**	**-521.1**	**-570.3**	**-607.4**
% of GDP	-1.3%	0.1%	-0.8%	-1.2%	-1.7%	-1.5%	-1.6%	-1.7%	-2.5%	-3.6%	-4.4%	-4.9%	-5.1%	-5.1%

Figure 1
Quarterly Forecast of Total Trade in Services, 2000-2003

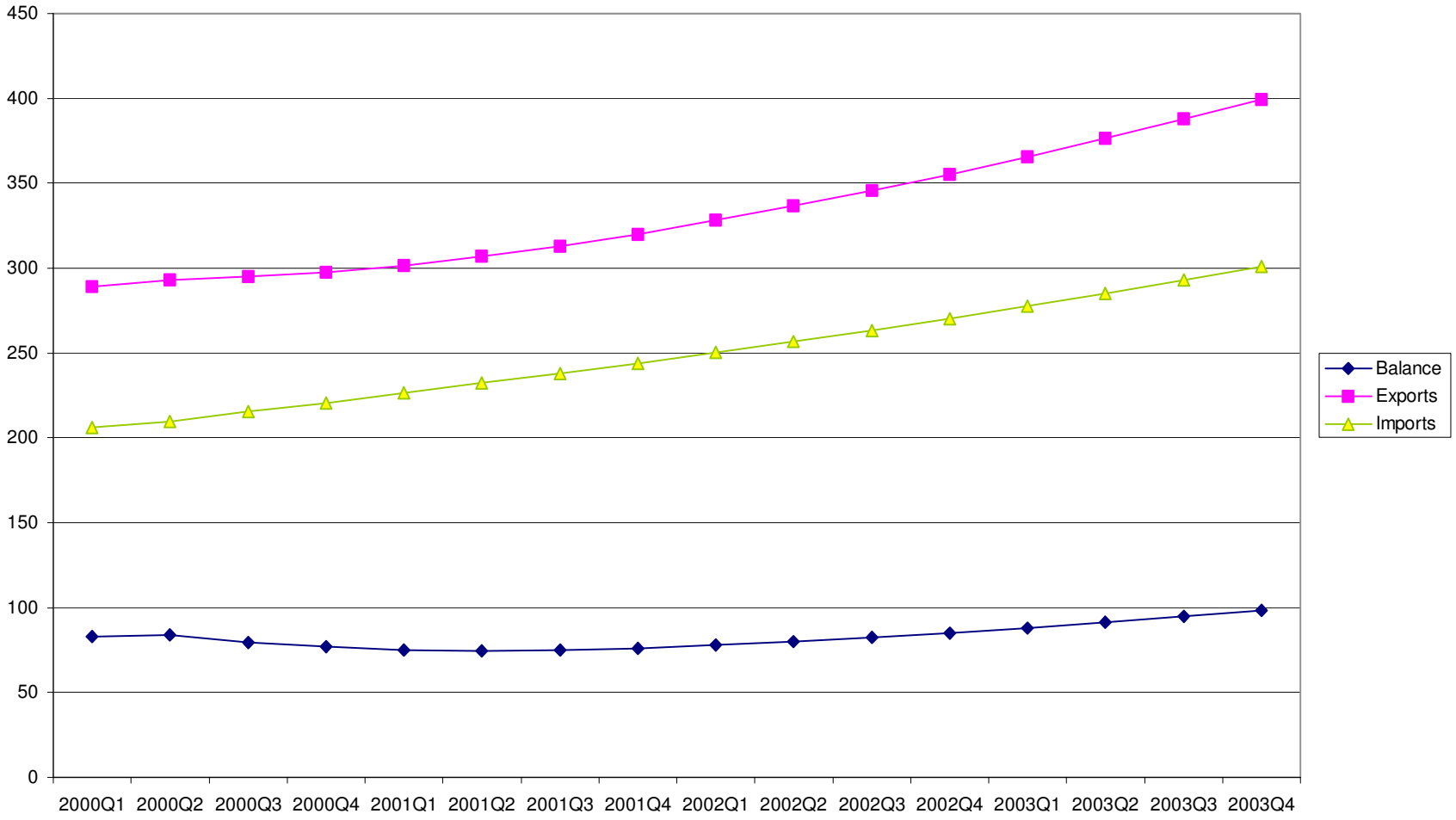


Figure 2
Quarterly Forecast of Trade in Travel Services, 2000-2003

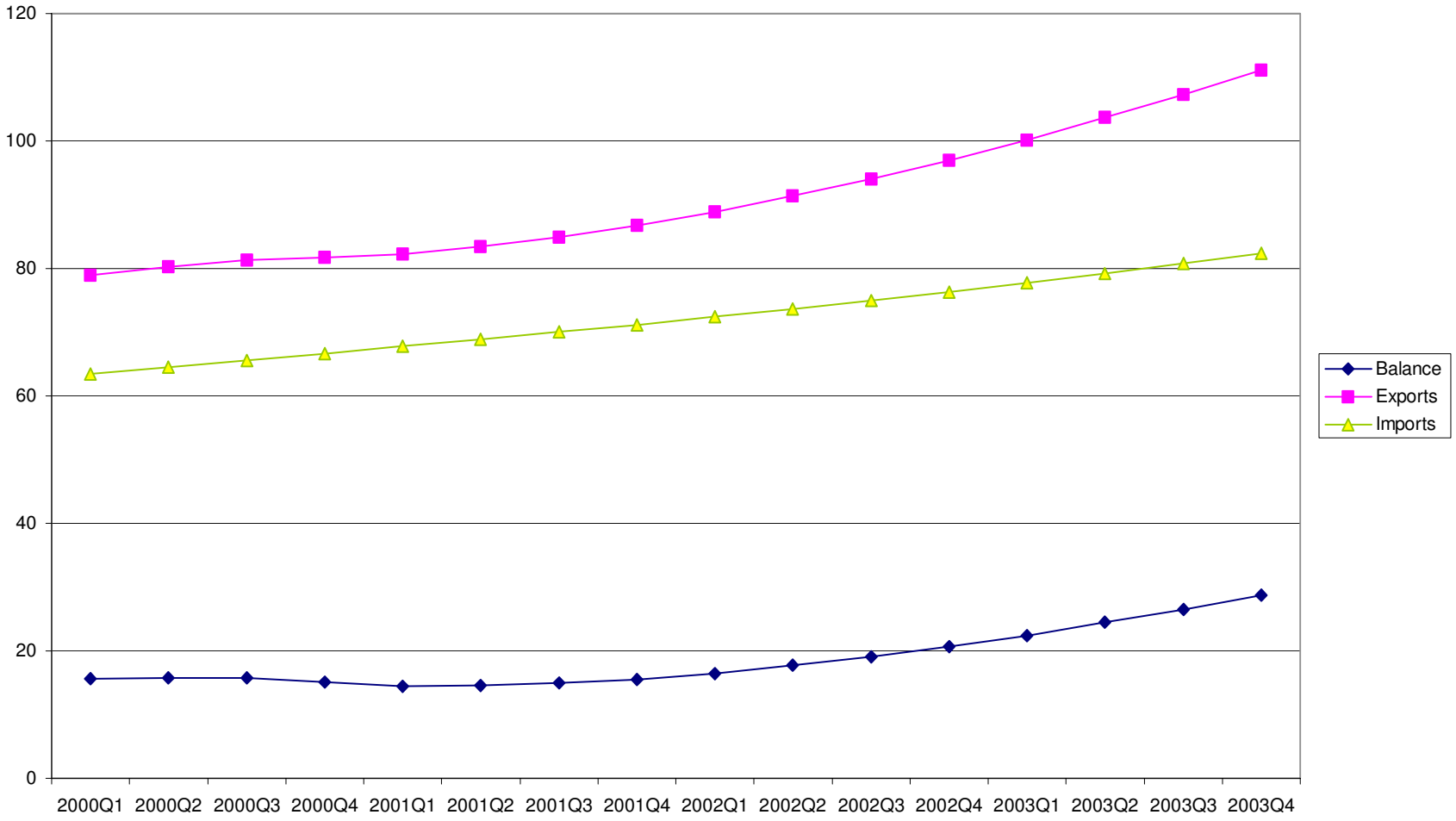


Figure 3
Quarterly Forecast of Trade in Passenger Fares, 2000-2003

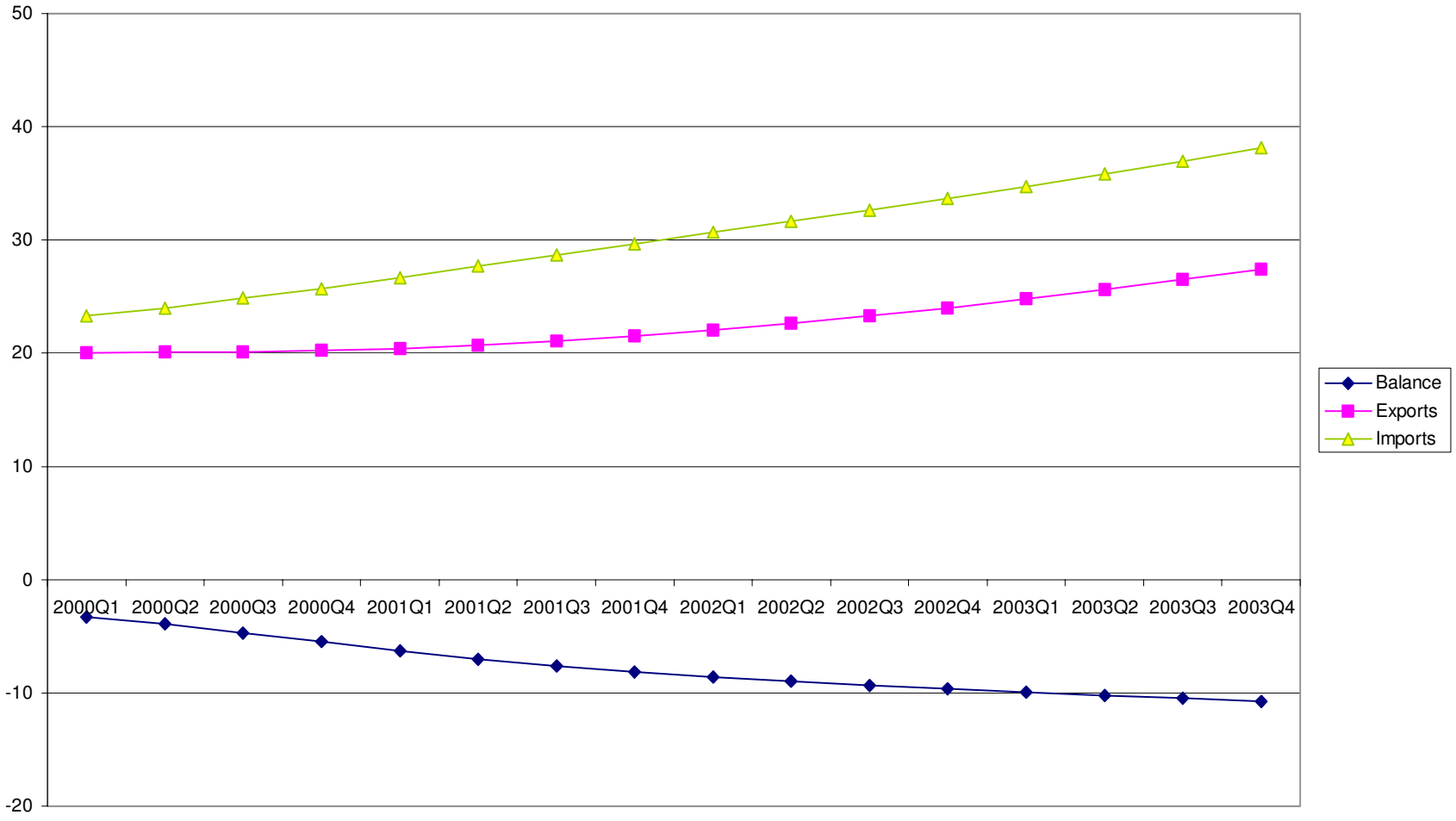


Figure 4
Quarterly Forecast of Trade in Transportation, 2000-2003

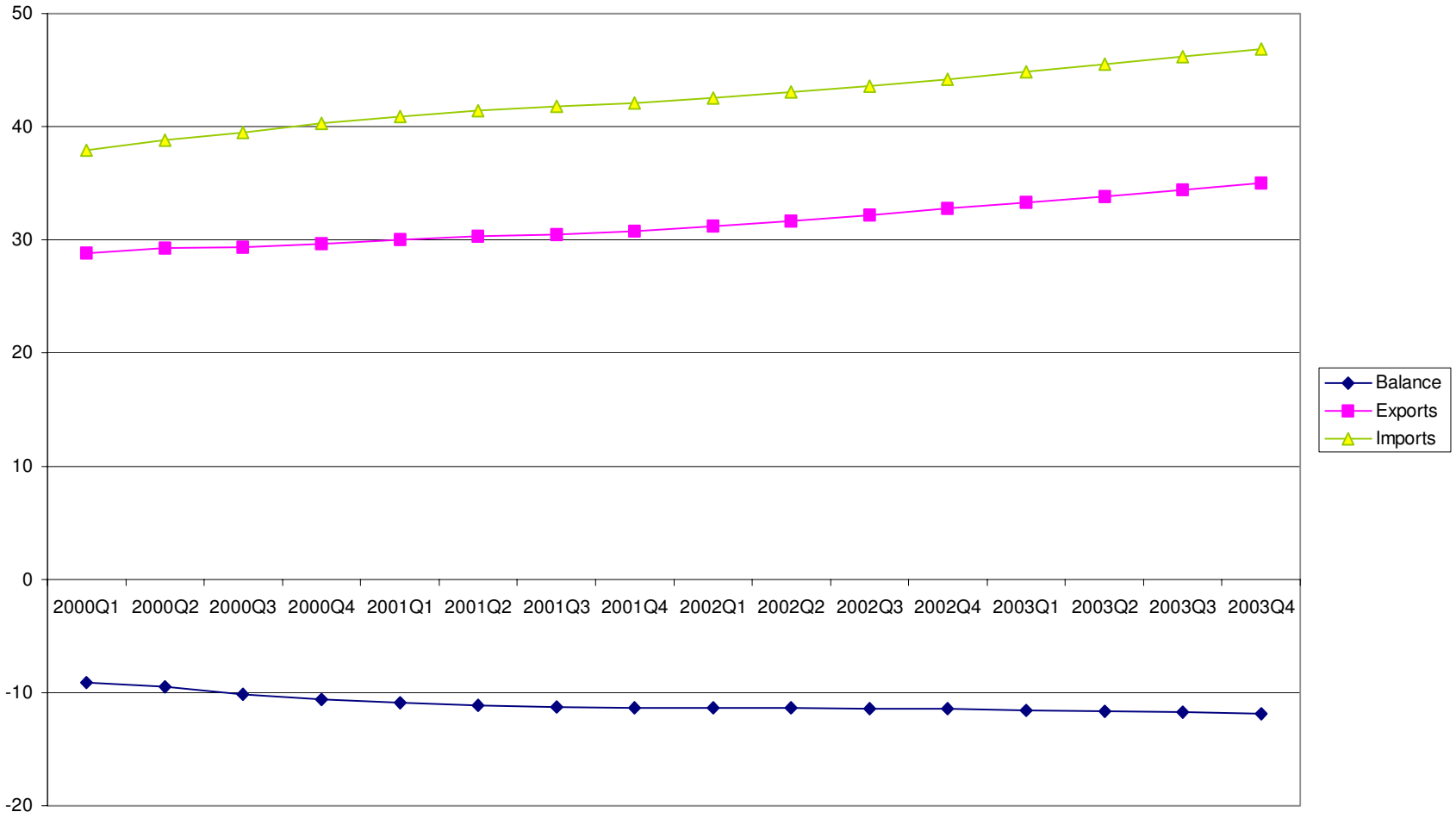


Figure 5
Quarterly Forecast of Trade in Other Private Services, 2000-2003

