IS A BRIGHTER FUTURE WAITING FOR THE U.S. CURRENT ACCOUNT BALANCE?
Mehdi Hojjat, Neumann University

ABSTRACT

This article uses cross sectional and times series data to forecast the U.S. current account balance and projects that the U.S. will have a surplus in that account in less than 10 years. This improvement will happen with the help of the energy sector; however, trade, service and income accounts will be also contributing. Both cross sectional and time series projections display a rather robust outlook for the U.S. current account balance. These predictions shatter many glooms and doom scenarios about the overreliance of America on Chinese capital to finance its deficit. By 2020, the U.S. could be in a position to actually finance the deficit of other countries.

JEL: F, F13

KEY WORDS: Current Account Balance, U.S. Trade Deficit, Balance of Payments, Cross-Sectional Analysis of Trade Data

INTRODUCTION

The current account deficit is an important economic variable showing the level of competitiveness of a nation. Usually surpluses in a current account are associated with more employment and creation of higher paying jobs. So, it is desirable to have a surplus in this account rather than a deficit. According to the Federal Reserve Bank of New York (2009), the current accounts are divided into the following four sub-accounts.

Merchandise trade consists of all raw materials and manufactured exported, minus those that are imported. The difference is a Balance on Merchandise Trade. Services include tourism, transportation, entertainment, engineering and business services, such as law, management consulting and accounting. Fees from overseas amusement parks, such as Euro Disney, patents and copyrights on new technology, software, books, music and movies also are recorded in the service category. The difference between those receipts and payments makes the Balance on Service.

Income receipts include income derived from ownership of assets which are held abroad, such as dividends on holdings of stock and interest on securities. Again, the differences between what we received from foreigners and what we pay them in these categories is called Balance on Income. Unilateral transfers represent one-way transfers of assets, such as worker remittances from abroad and direct foreign aid. In the case of aid or gifts, a debit is assigned to the capital account of the donor nation. Because of the double entry nature of the BOP accounting, if the U.S. provided gifts or humanitarian assistance, the entry is negative in this sub-account, and it values are entered as a positive number in Merchandise trade as export.

The U.S. current account deficit has been a subject of hot debates between researchers who believed the recent trend in the expanding the deficit will continues and those who believe the deficit gap is narrowing. As Table 1 shows, in 2009 the United States had a deficit in goods of $517 billion but a surplus in services of $138 billion, and Income of $70 billion. Adding Unilateral Transfers to these sums will result in a
negative balance of $392 billion. Therefore, in 2009, the U.S. had a deficit in its Current Account balance. U.S. has never had a surplus in its Current Account in the past 40 years.

Table 1: the U.S. Balance on Current Account, 2009 (Billions of Dollars)

<table>
<thead>
<tr>
<th>Merchandise Trade Balance</th>
<th>−517</th>
</tr>
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<tbody>
<tr>
<td>Balance on Services</td>
<td>+138</td>
</tr>
<tr>
<td>Balance on Income</td>
<td>+70</td>
</tr>
<tr>
<td>Balance on Merchandise, Services, and Income</td>
<td>−309</td>
</tr>
<tr>
<td>Unilateral transfers</td>
<td>−83</td>
</tr>
<tr>
<td>Balance on Current Account</td>
<td>−392</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce, Bureau of Economic Statistics, estimated based on the first nine month of statistics by the author

Since 2009, U.S. economy has substantially improved. Its current account has also improved and its capital account indicates a growing appetite by foreigners to invest in the United States. However, if the 2009 trend would have continued for a few more years, our worst fears and anxiety would have become a nightmarish reality. The following figure projects the U.S. current account balance if the 2009 crisis would have continued.

Figure 1: Previous Projection of the U.S. Current Account Balance ($000)

Figure 1 portrays dooms and glooms scenario for the U.S. current account balance believed by most researchers.

In the next section we review the literature in this subject, present data set and examine the inflection point on the U.S. current account balance. This inflection point is at the core of this article as it has been missed by previous researchers. By incorporating the inflection point in the data analysis, a robust picture of the U.S. current account balance will be revealed.

REVIEW OF LITERATURE

In 1998, Daniel Griswold (1998) from the Cato Institute wrote an article about the U.S. trade deficit. He wrote that article two years after the 1996 Asian financial turmoil. As he was projecting a deeper and deeper deficit for the U.S. current account balance, one of the main points of the article was the following: the U.S. trade deficit has no relationship with the U.S. unemployment rate. This point is still valid. In recent years, we observed inflection points in all trade data that make many of the previous trade analysis erroneous. In 1989, Howard (1989) who was one of the Directors working for the Governors of the Federal Reserve Bank predicted the recent path of the U.S. current account deficit and the consequent accumulation of external debts create a large, sharp depreciation of the dollar in the future. Others have worried about the implications of the United States as the world's largest "debtor nation," references to
the heavily indebted developing countries and the "debt crisis" have been voiced, as have been concerns about the growing foreign control implied by the growth in foreign claims on the United States. Except for 1990, Americans have run an annual current account deficit with the rest of world in every year since 1982. That unbroken string of deficits has colored much of the trade debate in the United States in the last two decades. Indeed, the deficit was partly to blame for a wave of angst in the late 1980s over so-called American "decline." Best-selling books such as Paul Kennedy's *The Rise and Fall of the Great Powers* and Clyde Prestowitz's (1989) *Trading Places: How We Allowed Japan to Take the Lead* caught the mood of the time. Throughout the 1980s and 1990s, the current account deficit has spawned worry about "unfair" foreign trade barriers, lost jobs, and America's ability to compete in the global marketplace. Kouparitsas (2005) in the Chicago Fed Letter stated that the size of the net export -exports less imports - has to fall by 3% to 3.5% of GDP to maintain the confidence of foreigners to lend U.S. to finance its current account deficit. But he does not make any comments as how this can be done or if it is practical.

Rafig (2010) examined the time-varying time series processes of the interaction between government fiscal deficits, the current account balance and the real exchange rate for the U.K. and U.S. economies. He concluded that future fiscal deficit reductions alone cannot eliminate U.K. and U.S. current account imbalances. Overall, he expressed a negative view on the U.S. current account calamity. The concern over the growing size of the U.S. current account balance has been the subject of study by several other researchers (Cavallo, M. 2006 and Helbling, T. 2005). The culmination of these researches can be summarized by the work of Cavallo (2006) who related these concerns to the depreciation of the value of U.S. dollar. Indeed, between 2002 and 2004, the dollar declined by about 15% against a broad basket of currencies. She stated that the dollar valuation effects are necessary for smoothing the adjustment process to a more balanced U.S. current account. Unfortunately, Cavallo (November 2006) did not foresee that the U.S. current account imbalance can also be balanced by trade reversal in several categories that are the subject of this article.

During the 2008 recession, the current account deficit disappeared, as trade and financing dried up. However, the factors that caused the deficit – high consumer debt, the U.S. Federal budget deficit and debt, and high savings rates in Japan and China – still remain. The prediction by Kimberly Amadeo (2012) was that if these factors not addressed, they will eventually limit U.S. economic growth because she considered the deficit was unsustainable and it the greatest single threat to the global economy. My assertion is that since the U.S. economy is so large and comparatively stable, it is unlike other countries and can carry the current account deficit without a problem. In March 2014, New York Times (March 14, 2014) reported that big gains in exports and overseas investment income narrowed the United States’ current-account deficit in the fourth quarter to the lowest level in 14 years. The imbalance fell to $81.1 billion in the fourth quarter of 2013, down from $96.4 billion in the previous quarter, according to the U.S. Commerce Department. That was the smallest gap since the third quarter of 1999.

One of the most volatile economic consequences of the global financial crisis was a decline in the U.S. trade deficit in 2009 and a subsequent improvement in the U.S. current account balance. After 2009, creation of new natural gas industry not only significantly reduced the U.S. import of energy products but also created thousands well-paying jobs in this industry. At the same time, a rising demand for U.S. exports to emerging markets such as the BRICK countries (Brazil, Russia, India, China and Korea) means higher demand for the U.S. dollar which maintains its value as the most important reserve currency in the world. In 2014, five years after the global financial crisis, I broaden Griswold’s research from a mere trade balance to the U.S. current account balance and come up with a very different conclusion. In this article, we will examine recent data on the U.S. current account to see it diverges from the old declining pattern and then we will forecast its future trend.
DATA AND METHODOLOGY

The U.S. current-account deficit—the combined balances on trade in goods and services, income, and net unilateral current transfers—decreased to $98.9 billion in the second quarter of 2013 from $104.9 billion in the first quarter of 2013. The decrease in the current account deficit was accounted for by a decrease in the deficit on imported goods, an increase in the surplus on income, and an increase in the surplus on services. These changes were partly offset by an increase in net outflows of unilateral current transfers, such as government grants, government pensions and other transfers, and private remittances. The deficit on goods and services decreased to $117.8 billion in the second quarter from $122.6 billion in the first. The deficit on goods decreased to $175.7 billion in the second quarter from $179.5 billion in the first. Graph 2 shows the trend on the U.S. goods export and import. As shown in this, in the second quarter of 2013 (the latest available quarter as of this writing) goods exports increased to $394.7 billion from $390.7 billion. Exports in four of the six major end-use categories increased. The largest increases were in capital goods and in consumer goods. The increase in capital goods was largely due to an increase in civilian aircraft, engines, and parts. This rising trend of exports has its origin in 2009, after the global financial crisis.

Figure 2: Pattern of U.S. Export and Import of Goods

In the second quarter of 2013, goods imports decreased to $570.4 billion from $578.3 billion a year earlier. Increases in five of the six major end-use categories were nearly offset by a substantial decrease in industrial supplies and materials. The largest increase was in automotive vehicles, parts, and engines, much of that in passenger cars. The decrease in industrial supplies and materials was mostly due to a decrease in petroleum and products. As the U.S. becomes more self-sufficient in the production of oil and natural gas, U.S. imports in this category will decrease. Large oil reserves found by Pioneer Natural Resources Company (stock symbol: PXD) in Texas will make U.S. the largest producer of oil in the world. In November 2013, U.S. production of oil exceeded its imports, and the U.S. became the largest producer of oil and gas in the world.

Thanks to hydraulic fracturing (or fracking) and the ability to drill horizontally, oil and gas production in the U.S. has skyrocketed. [Fracking is a drilling technique that blasts millions of gallons of water and chemicals to fracture rock formations deep beneath the surface and release gas and petroleum.] The production of natural gas by fracking technology has produced an abundance of this energy, to the point that the price of one thermal square foot (TSF) of natural gas in the US is 25 percent of the world price, $3.75 versus $15. This new trend means that U.S. is no longer an importer of Liquefied Natural Gas.
(LNG) from such countries as Qatar or Nigeria. Furthermore, the terminals in the U.S. that were built for imports of LNG have been turned into export terminals and within two years the U.S. will become a major exporter of natural gas. Cheniere Energy, Inc (Stock Symbol: LNG) is investing in a LNG plant in Louisiana and other firms are investing in the Chesapeake region of Maryland. The cost of the liquefaction of natural gas is about $3 per TSF, adding an additional $3 for its transportation cost brings the U.S. (FOB) price of exporting natural gas to $9.75, which is well below the current world price of natural gas. As shown in Figure 3, this new trend in U.S. energy production, import and export is gradually changing the outlook for the U.S. balance on goods and the current account. The data suggest a decrease of 4 percent per quarter or 16 percent annually in imports of petroleum.

Figure 3: U.S. Trade in Petroleum Products ($Millions)

Figure 2 reveals a dramatic reversal on the U.S. reliance on imported oil, as the level of imports of petroleum products is declining and soon the level of export of petroleum products will be on the rise. Source of Data: American Petroleum Institute.

The rapid increase in U.S. natural gas output can be attributed to the extraction of the commodity from shale formations. Natural gas as well as crude oil production has contributed to the U.S. producing 14 percent more of its own energy needs now compared to 2005, according to data from the Energy Information Agency. Assuming the Department of Energy will issue export permits, by 2015, U.S. will start exporting natural gas from Louisiana, Texas and Maryland LNG terminals. Since 2011, four such projects have been approved. The most recent decision was made in September 2013, when Dominion Resources (stock symbol: D) received approval for the Cove Point terminal on the Maryland shore of the Chesapeake Bay. To date, the DOE has authorized 6.37 billion cubic feet of LNG from the plant to be sold overseas. The expected export of LNG based on $12 per cubic feet, will have a great impact on the U.S. current account balance. Table 2 reports the expected additional export of LNG.

Table 2: U.S. Projected Export of LNG

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<tbody>
<tr>
<td>Annual Export of LNG (billion CF)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Export Price per Cubic Feet</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
</tr>
<tr>
<td>Additional Export of LNG ($b)</td>
<td>$12</td>
<td>$24</td>
<td>$36</td>
<td>$48</td>
<td>$60</td>
<td>$72</td>
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</table>

Table 2 presents a cross sectional projection of U.S. export of LNG based on the assumptions that the recent trend in LNG production continues and the U.S. government issue export permits.
There are also improvements in the U.S. export of manufactured goods. In December 2013, Automotive News (December 13, 2013) reported about the rebound in the U.S. auto industry. “Saudis driving Ford F-150 pickups and Chinese coveting Jeep SUVs mean more automobiles are filling up ships leaving U.S. ports, boosting revenue for vessel operators and, in turn, helping cut automakers' per-vehicle shipping costs.” General Motors, Ford, Toyota and BMW are among the firms reporting higher car exports from their U.S. plants to Asian and European countries. In 2013, the United States exported a record 2 million cars and light trucks, and shipments in 2014 are rising over the previous year, according to Commerce Department data (December 18, 2013). Figure 4 shows the recent improvement in the U.S. balance of goods.

Figure 4: Improvement in the U.S. Trade Balance in Goods

![Improvement in the U.S. Balance in Goods](image)

Figure 4 demonstrates a rather sharp improvement in the recent balance of merchandise trade which is the largest category in the U.S. current account. Source of Data: Bureau of Economic Analysis, Release Date: September 19, 2013. Retrieved from Table 2a.

The surplus in services increased from $56.8 billion in the first quarter of 2013 to $57.9 billion in the second quarter of 2013. As shown in the following graph, this increase has started in 2012.

Figure 5: U.S. Trade in Services ($Millions)

![U.S. Trade in Services](image)

Figure 5 shows export of service has been more than import of service resulting in a surplus in this category of the U.S. current account. Source of Data: Bureau of Economic Analysis, Release Date: September 19, 2013. Retrieved from Table 3a.
Services exports increased to $169.2 billion from $167.2 billion. Exports increased in five of the seven major services categories. More than half the increase was in other private services, primarily in financial services and in business, professional, and technical services. As shown in Figure 6, the import of services has remained rather flat and has stabilized at around $111 billion. In recent years, the largest increases were in travel categories as more Americans are now financially comfortable and able to travel overseas. With a stable import and a rising export of services, the surplus in the service trade has been rising.

Figure 6: U.S. Trade in Services ($Millions)

![Figure 6: U.S. Trade in Services ($Millions)](image)

Figure 6 shows improvement of the U.S. Balance on Service with a rather strong uptrend line. Source of Data: Bureau of Economic Analysis, Release Date: September 19, 2013. Retrieved from Table 3a.

The share of service in total exports is also on the rise. As shown in the following graph, the export of services in 1995 was only 26.4% of total export. In 2013, this share grew to 29.5 percent. This trend is expected to continue and will play a critical role in our projection of the U.S. current account balance. Quarterly data suggest a 4 percent increase per year in the export of services and the U.S. balance on service trade, thanks mostly to the U.S. advantages in the internet technology. However, interventionist policies in the sphere of the virtual world, as exposed by Edward Snowden, can create a protectionist policy among even our closest trading allies. This hegemony over service trade has to be respectfully maintained so it does not violate the rights of sovereign nations, including our close trading allies (BEA, September 2013).

Figure 7: Share of Goods and Services in U.S. Exports (BEA, 2nd Quarter 2013)

![Figure 7: Share of Goods and Services in U.S. Exports (BEA, 2nd Quarter 2013)](image)

Figure 7 demonstrates the share of service as percentage of total export are on the rise, from 22 percent in 1985 to 30 percent in 2013. Source of Data: Bureau of Economic Analysis (BEA) for 2013 data, BEA and Haver Analytics for 1985 data. Retrieved from Economic Review, Second Quarter 201, page 33.

As shown in the following graph, in the second quarter of 2013, the surplus on income increased to $53.1 billion from $50.9 billion in the first.
Figure 8: U.S. Income Account ($Millions)

Figure 8 shows a sustainable surplus on balance of income as both income receipts and income payments are stable.

In the past several years, income receipts which consist of interest, dividends and direct investment on U.S.-owned assets abroad, have been within a range $190 billion per quarter. Income payments on foreign-owned assets in the United States have also been stable around $135 billion per quarter. Most of the payments in this category are interest payment by the U.S. government on its national debt which is nearing $17 trillion. Compensation of employees is a small and less volatile category of the U.S. income account. Receipts for compensation to U.S. residents paid by nonresidents are around $1.7 billion per quarter and payments compensation to foreign resident employees paid by U.S. residents are about $3.8 billion per quarter. Net unilateral current transfers to foreigners were $34.2 billion in the second quarter of 2013, up from $33.1 billion in the first. The increase was mostly due to an increase in net outflows of U.S. government pensions and other transfers that resulted from a decrease in fines and penalties received by the U.S. government from foreign corporations. U.S.

Government grants to foreigners also increased. As shown in Figure 9, except for 1990, Americans have run an annual current account deficit with the rest of world in every year since 1982. That unbroken string of deficits has colored much of the trade debate in the United States in the last two decades. Indeed, the deficit was partly to blame for a wave of angst in the late 1980s over so-called American "decline." Best-selling books such as Paul Kennedy's *The Rise and Fall of the Great Powers* (1987) and Clyde Prestowitz's *Trading Places: How We Allowed Japan to Take the Lead* (1988) caught the mood of the time. Throughout the 1980s and 1990s, the current account deficit has spawned worry about "unfair" foreign trade barriers, lost jobs, and America's ability to compete in the global marketplace. However, as this section will show none of these statements were true.

Beginning in the early 1990s, annual U.S. trade deficits reached unprecedented levels. After deficit reached $800 billion in 2006, and the deficit as a percentage of GDP approached the unprecedented level of 6% (see Figure 10). In the aftermath of the global financial crisis, however, the current account deficit started to shrink. By 2009, the account trade deficit was cut in half, to less than $400 billion, which shattered all doom and gloom projections in this area.
Researchers have identified a number of macroeconomic variables as indicators of the U.S. export growth. For example, Jun Nie and Lisa Taylor found that U.S. export growth depends on the economic growth in the rest of the world. Not many scholarly papers have examined the effects of growth in the service sector and petroleum production on the U.S. current account. Forecasting the U.S. current account balance in based on the following three assumptions:

- Four percent improvement of trade in service per year
- Increase in the export of LNG as shown in Table 2
- A reduction of 4 percent per year in imports of petroleum products

Using quarterly and annual data, we can make the following projection for the U.S. current account balance.
Figure 11: Projected U.S. Current Account Balance ($B)

Figure 11 is the projection of the U.S. current account balance based on cross sectional analysis of trade and service accounts of the U.S. balance of payments account. The assumptions include 4 percent increase in the service account, four percent decline on petroleum imports and a gradual increase in LNG exports from Louisiana and Maryland LNG ports. For more information see Hojjat (2014): “Cross Sectional and Time Series Forecast of the U.S. Current Account Balance.”

Using time series data we arrive at a similar projection. The following graph (Figure 12) shows the trend line for the current account deficit with the following equation:

\[ Y = 807.26 + 43.86 T \]

\( t \)-statistics \( 3.2 \)

\( R^2 \) \( 0.5949 \)

Where \( Y \) presents the U.S. current account balance and \( T \) presents the year, \( t \)-statistics is 3.2 which provide 98% confidence interval. Using the above equation, Table 3 projects the projection of the U.S. current account deficit for 2014 through 2020.

Figure 12: U.S. Current Account Balance Using Time Series (2004-2013)

This regression line shows almost 60 percent of the variation in the current account data set is explained by the regression equation. Therefore, the equation has a high predictability power.

As shown in Table 3, this article makes a rather robust projection of the U.S. current account balance and is assets that by 2020, the U.S. will have a slight surplus in that account.
Table 3: Projected U.S. Current Account Balance Using Time Series Data ($B)

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>-193.22</td>
</tr>
<tr>
<td>2015</td>
<td>-149.36</td>
</tr>
<tr>
<td>2016</td>
<td>-105.5</td>
</tr>
<tr>
<td>2017</td>
<td>-61.64</td>
</tr>
<tr>
<td>2018</td>
<td>-17.78</td>
</tr>
<tr>
<td>2019</td>
<td>26.08</td>
</tr>
<tr>
<td>2020</td>
<td>69.94</td>
</tr>
</tbody>
</table>

Table 3 presents the projection of the U.S. current account balance, equilibrium will be achieved by 2018 and for the first time in 4 decades U.S. will have a surplus in the current account balance by 2020.

RESULTS

Both cross sectional and time series projections display a rather robust outlook for the U.S. current account balance. Both Figure 11 and Table 3 project that by 2020 U.S. will have a current account surplus. These predictions shatter many glooms and doom scenarios about the overreliance of America on Chinese capital to finance its deficit. By 2020, the U.S. could be in a position to actually finance the deficit of other countries.

CONCLUDING REMARKS

It was the objective of this article to dissolve the myths that existed regarding the overgrowing size of the U.S. current account balance and its adverse impact on U.S. economy. The times series and cross sectional projections clearly indicate that we are nearing an inflection point in the projection of the U.S. current account deficit. In this article we estimated that by 2020, the U.S. will post current account surpluses, thanks mostly to an improvement in the U.S. trade balance. Higher exports, especially the export of energy products and lower imports of energy will make this happen. The current account will also receive a boost from higher surpluses in the service and income accounts. Over time, as more statistics become available, we should test this robust projection and reaffirm or reject creation of inflection point in the current account data. This research can be expanded to encompass projections of the U.S. capital account and the status of the U.S. balance of payments.

REFERENCES


Bureau of Economic Analysis. (September 19, 2013). Retrieved from Table 2a and Table 3a


**BIOGRAPHY**

Mehdi Hojjat is a professor of finance and international business with thirty years of service to business community and students. He is a graduate of Tehran University where he received his Bachelor of Science in Accounting. He received his Master Degree in Business Administration (MBA) from American University in Washington, D.C. He also received his Master Degree in Industrial Engineering and a
Doctor of Philosophy in Finance from Lehigh University. Mehdi Hojjat has published a book (*Business Strategy Simulation*) and over 20 articles. He was the founder and Director of International Trade Development Center at Lehigh University and assisted over 200 firms to expand their operations to international markets. He has specialization in international business planning, financial modeling and has organized several international trade missions. He has over fifteen years of experience working with business community and has several years of professional financial experiences.

Contact Information: Hojjatm@neumann.edu, 610-558-5592