

## Will The U.S. Capital and Financial Account Forecast the U.S. Need Foreign Capital to Finance its Deficit?

Mehdi Hojjat

Neumann University, Pennsylvania, USA

\*Corresponding Author

Mehdi Hojjat

Email: [hojjatm@neumann.edu](mailto:hojjatm@neumann.edu)

**Abstract:** This research paper builds upon an earlier article by the author (Hojjat, 2014)[1] that used cross sectional and times series data to forecast the U.S. current account balance. This article projects the U.S. capital and financial account by using cross sectional and time series data and reaches the conclusion that the surplus in the capital account will be shrinking as the U.S. would not need foreign capital to finance its current account deficit. This surplus will be drastically cut in less than 10 years. Both cross sectional and time series projections indicate that U.S. overreliance on foreign capital will be over by 2020, and the U.S. could be in a position to actually finance the deficit of other countries.

**Keywords:** U.S. capital account, U.S. financial account, balance of payments, international finance

### INTRODUCTION

As generally know, most U.S. economic accounts are in deficit, however, there is a rather large surplus in the U.S. capital account. Why? An understanding of the capital account surplus begins with the balance of payments, the broadest accounting of a nation's international transactions. By definition, the balance of payments always equals zero -- that is, what a country buys or gives away in the global market must equal what it sells or receives -- because of the exchange nature of trade. People, whether trading across a street or across an ocean, will generally not give up something without receiving something of comparable value in return. The double-entry nature of international bookkeeping means that, for a nation as a whole, the value of what it gives to the rest of the world will be matched by the value of what it receives.

The balance of payments accounts capture two sides of an equation: the current account and the capital and financial accounts. The current account side of the ledger covers the flow of goods, services, investment income, and uncompensated transfers such as foreign aid and remittances across borders by private citizens. Within the current account, the trade balance includes goods and services only, and the merchandise trade balance reflects goods only. On the other side, the capital account includes the buying and selling of investment assets such as real estate, stocks, bonds, and government securities.

If a country runs a capital account surplus of \$100 billion, it will run a current account deficit of

\$100 billion to balance its payments. As economist Douglas Irwin explains, "If a country is buying more goods and services from the rest of the world than it is selling, the country must also be selling more assets to the rest of the world than it is buying." [2]

The necessary balance between the current account and the capital account implies a direct connection between the current account balance on one hand and the savings and investment balance on the other hand. That relationship is captured in the simple formula:

$$\text{Savings} - \text{Investment} = \text{Total Exports and Receipts} - \text{Total Imports and Payments}$$

Thus, a nation that saves more than it invests, such as China, will export its excess savings in the form of net foreign investment. In other words, it must run a capital account deficit. The money sent abroad as investment will return to the country to purchase exports in excess of what the country imports, creating a corresponding trade surplus. A nation that invests more than it saves—the United States, for example—must import capital from abroad. In other words, it must run a capital account surplus. The imported capital allows the nation's citizens to consume more goods and services than they produce, importing the difference through a current account deficit.

The transmission belt that links the capital and current accounts is the exchange rate. The current account deficit creates a demand for foreign currency to

pay for the deficit. Higher demand for foreign currencies increases their values in the exchange market and, hence, results in depreciation of the value of the home currency.

In this article, we first define capital and financial accounts. Then, after the review of the literature pertaining to the U.S. balance of payment, we examine the most recent data on the U.S. capital and financial accounts. That will be followed by our projection for the U.S. capital and financial account balances.

Capital account consists of the following four categories: foreign direct investment (FDI), portfolio investment, other investment, and official reserve account [12].

- A. *Foreign direct investment* (FDI) refers to long term capital investment such as the purchase or construction of machinery, buildings or even whole manufacturing plants. If foreigners are investing in a country, that is an inbound flow and counts as a surplus item on the capital account. If a nation's citizens are investing in foreign countries, that's an outbound flow that will count as a deficit. After the initial investment, any yearly profits not re-invested will flow in the opposite direction, but will be recorded in the current account rather than as capital.
- B. *Portfolio investment* refers to the purchase of shares and bonds. It's sometimes grouped together with "other" as short term investment. As with FDI, the income derived from these assets is recorded in the current account; the capital account entry will only be for any buying or selling of the portfolio assets in the international capital markets.
- C. *Other investment* includes capital flows into bank accounts or provided as loans. Large short term flows between accounts in different nations are commonly seen when the market is able to take advantage of fluctuations in interest rates and / or the exchange rate between currencies. Sometimes this category can include the *reserve account*.
- D. *Reserve account* is operated by a nation's central bank to buy and sell foreign currencies; it can be a source of large capital flows to counteract those originating from the market. Inbound capital flows (from sales of the account's foreign currency), especially when combined with a *current account* surplus, can cause a rise in value of a nation's currency, while outbound flows can cause a fall in value (depreciation). If a government (or, if authorized to operate independently in this area, the central bank itself) doesn't consider the market-driven change to its currency value to be in the nation's best interests, it can intervene.

## REVIEW OF LITERATURE

In 1989, Howard [3] who was one of the Directors working for the Governors of the Federal Reserve Bank, predicted that the recent path of the U.S. current account deficit and the consequent accumulation of external debts would 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 sensitivity of U.S. 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 (1987) "*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 spawned worry about "unfair" foreign trade barriers, lost jobs, and America's ability to compete in the global marketplace. Kouparitsas [4] 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 did comment as to how this can be done or if it is practical.

Rafiq [5] (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 balances which he described as calamity. The concern over the growing size of the U.S. current account balance has been the subject of study by several other researchers -- Helbling, T. [6] and Cavallo, M. [7]. The culmination of this research 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 [8] 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 [9] was that if these factors are not addressed, they will eventually limit U.S. economic growth. She considered the deficit as unsustainable and its greatest single threat to the global economy.

### MAIN THEME OF THE ARTICLE

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) [10] reported that big gains in exports and overseas investment income had narrowed the United States' current-account deficit in the fourth quarter of 2013 to the lowest level in 14 years. According to the Commerce Department, the imbalance fell to \$81.1 billion in the fourth quarter of 2013, down from \$96.4 billion in the previous quarter. 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, the 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.

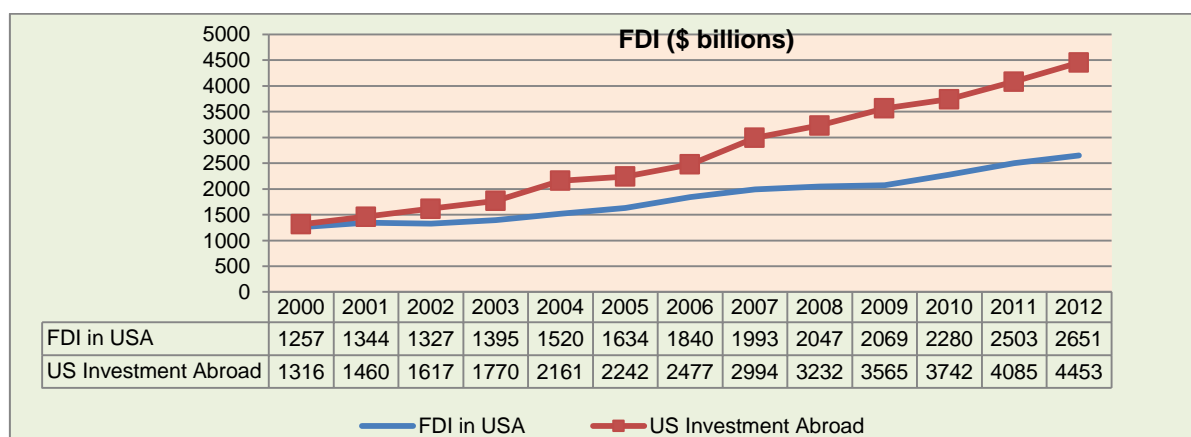
This article is written five years after the U.S. recovered from one of its worst financial crisis. However, the U.S. economy did not just recover but leaped forward to become a very competitive economy in the world. Its current account deficit is shrinking and its label as the world's "largest debtor nation" is vanishing. In the next section, we will examine recent data on the U.S. capital account to see how it is diversifying from its previous patterns and then we will forecast its future trend.

### DATA AND METHODOLOGY

#### Foreign Direct Investment

More than 50 percent of net inflows in the financial account are made of foreign direct investment (FDI). The rest consists of changes in the U.S. assets abroad and foreign assets in the U.S. (both private and official). It also includes currency transfers and net flow of financial derivatives which are very small portion of the financial account. Because of the importance of FDI in creating jobs, improving productivity and fostering economic growth, we examine it first.

As shown in Figure 1, since 2000 both the U.S. investment abroad and FDI in the U.S. are rising. Although the U.S. investment abroad increased by 238% between 2000 and 2012, FDI in the U.S. increased by only 111%. Both trends are indicative of a larger need for the U.S. to finance its trade and current account deficit, i.e., the more the U.S. invests abroad, the more it needs foreign funds to finance its deficit [11].

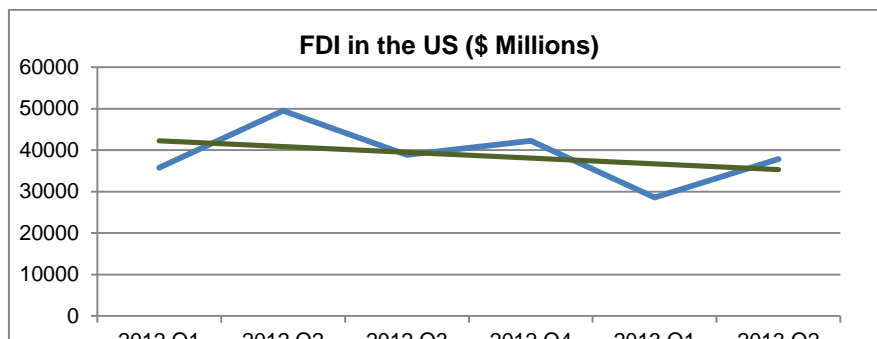


**Fig-1: FDI in the U.S. and the U.S. Investment Abroad**

Figure 1 shows a healthy rate of increase in both FDI in USA and also U.S. investment in other countries  
Source: Bureau of Economic Analysis, *Foreign Direct Investment in the U.S., Foreign Direct Investment Position in the United States on a Historical-Cost Basis*. November 2013.

Fortunately, this trend is changing in recent quarters. In the second quarter of 2013, foreign direct investment (FDI) in the United States was \$37.9 billion, up from \$28.6 billion in the first. The increase was accounted for by lower net outflows of investment and by larger reinvested earnings than in the first quarter.

As shown in the following graph, there is a down-turn trend line in FDI in the US. As the current account balance in the U.S. improves, the United States does not need as much FDI to finance its deficit. At the same time, the U.S. is keeping more of its savings at home for investment rather than sending them abroad.



**Fig- 2: Foreign Direct Investment in the U.S. (Quarterly Data)**

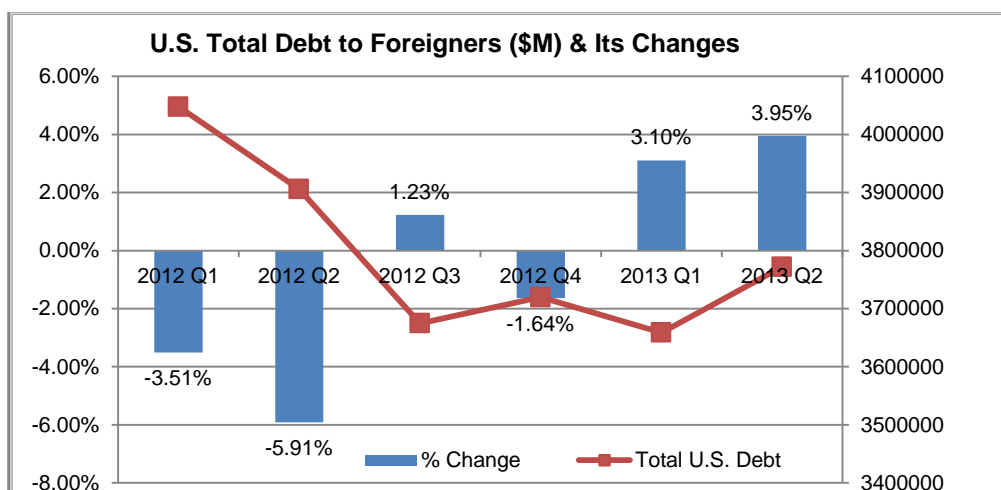
*Bureau of Economic Analysis, Retrieved from Table 7a and Table 11a .  
This analysis is based on raw data retrieved from Bureau of Economic Analysis: Table 11a. Liabilities to Foreigners, Except Foreign Official Agencies, Reported by U.S. Banks and Securities Brokers /1/ (November 2013)*

Currently the U.S. has no problem selling its securities abroad. For example, foreign private sales of the U.S. Treasury securities exceeded purchases (net sales) by \$0.3 billion in the second quarter of 2013, a shift from net purchases of \$50.8 billion in the first quarter. Figure 2 also depicts a declining trend line in the most recent FDI in the U.S.

In other areas the trend is the same. Foreign private sales of the U.S. securities other than the U.S. Treasury securities exceeded purchases (net sales) by \$30.0 billion in the second quarter, up from net sales of \$11.0 billion in the first. Net purchases of the U.S. corporate bonds were \$19.8 billion, down from \$32.3

billion. Net sales of the U.S. stocks were \$29.7 billion, up from \$23.4 billion. Net sales of the U.S. federally sponsored agency bonds were \$20.1 billion, up from \$19.8 billion.

All and all, these examples show a brighter perspective on total US indebtedness of to foreigners. As of the end of the second quarter of 2013, the total the U.S. debt to foreigners was \$4.17 trillion. As shown in Figure3, total the U.S. debt has been stabilizing at around \$4 trillion and shows a slightly declining trend over the past two years. This figure indicates a 3.12 percentage cumulative decline over 6 quarters (from the first quarter of 2012 to the second quarter of 2013) [12].



**Fig-3: Stabilizing the U.S. Debt to Foreigners (\$ millions)**

*Bureau of Economic Analysis, Release Date: September 19, 2013. Retrieved from Table 7a and Table 11a .*

## Portfolio Investment

According to the Bureau of Economic Analysis, net financial inflows were \$73.1 billion in the second quarter of 2013, up from \$40.4 billion in the first. Having already examined the flow of foreign direct investment, let us now turn our attention to the flows of assets.

#### U.S.-owned assets abroad

US-owned assets abroad increased \$109.6 billion in the second quarter of 2013 after increasing \$229.1 billion in the first. The U.S. direct investment abroad was \$95.5 billion in the second quarter, up from \$84.1 billion in the first. The increase was more than accounted for by a shift in equity investment to net outflows in the second quarter from net inflows in the first quarter. One of the reasons for having a large volume of US assets abroad is the U.S. tax system that exempts the U.S. corporate profits that are kept abroad. These profits then get invested. The goods that are produced from these invested then exported to the U.S. and unfairly compete with the U.S. made goods.

For example, the U.S. purchases of foreign securities exceeded sales (net purchases) by \$80.1 billion in the second quarter of 2013, down from net purchases of \$133.8 billion in the first. Net purchases of foreign bonds were \$3.8 billion, down from net purchases of \$60.0 billion in the first. Net purchases of foreign stocks were \$76.3 billion, up from net purchases of \$73.8 billion in the first.

#### Foreign-owned assets in the United States

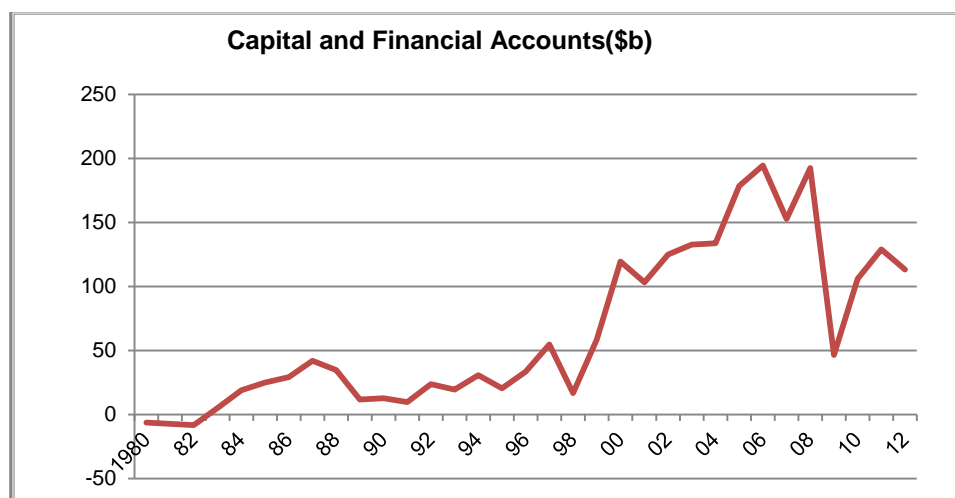
Foreign-owned assets in the United States increased \$179.3 billion in the second quarter of 2013 after increasing \$265.5 billion in the first.

#### Reserve Account

The U.S. official reserve assets decreased \$0.2 billion in the second quarter of 2013 after increasing \$0.9 billion in the first. The second-quarter decrease reflected a decrease in the U.S. reserve position in the International Monetary Fund. U.S. government assets other than official reserve assets decreased \$3.9 billion in the second quarter of 2013 after increasing \$0.4 billion in the first. The decrease reflected a reduction of central bank liquidity swaps between the U.S. Federal Reserve System and foreign central banks.

Foreign official assets in the United States decreased \$9.7 billion in the second quarter of 2013 after increasing \$126.9 billion in the first. The second-quarter decrease was more than accounted for by net sales of U.S. government securities.

The following figure (Figure 4) provides the balance on the capital account since 1980. As it shows, the U.S. has surpluses in the capital and financial accounts which are the sources of financing of the U.S. current account deficits.

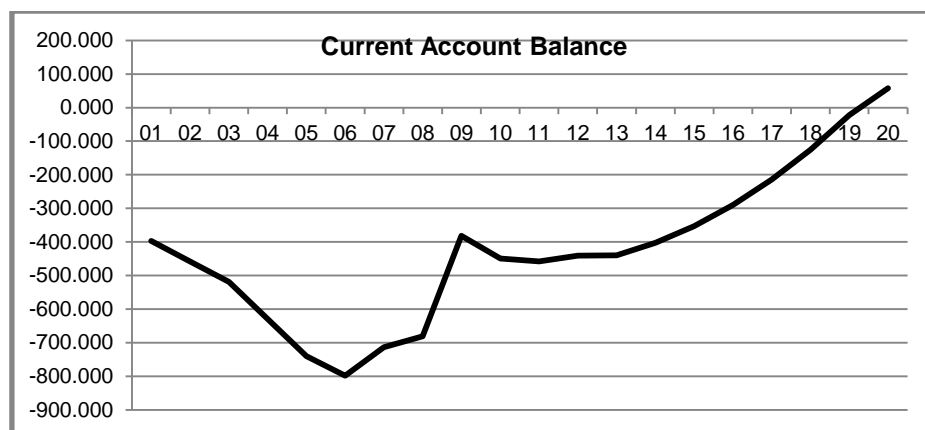


**Fig-4: Balance in Capital and Financial Accounts Including Reserve Account (\$ billions)**

Organization for Economic Co-operation and Development -Capital Accounts and Financial Accounts: Total Balance Including Change in Reserve Assets for the United States. (database),<http://dx.doi.org/10.1787/data-00052-en> (Accessed via Federal reserve Bank of Saint Louis on November 22, 2013)

Relationship between the current account and the capital/financial accounts - Hojjat (2014) made a cross sectional and time series forecast on the U.S. current account balance which we use to show the

relationship between the U.S. current account and capital account. Figure 5 displays his projection of the current account.



**Fig-5: Projected U.S. Current Account Balance (\$b)**

Figure 5 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"

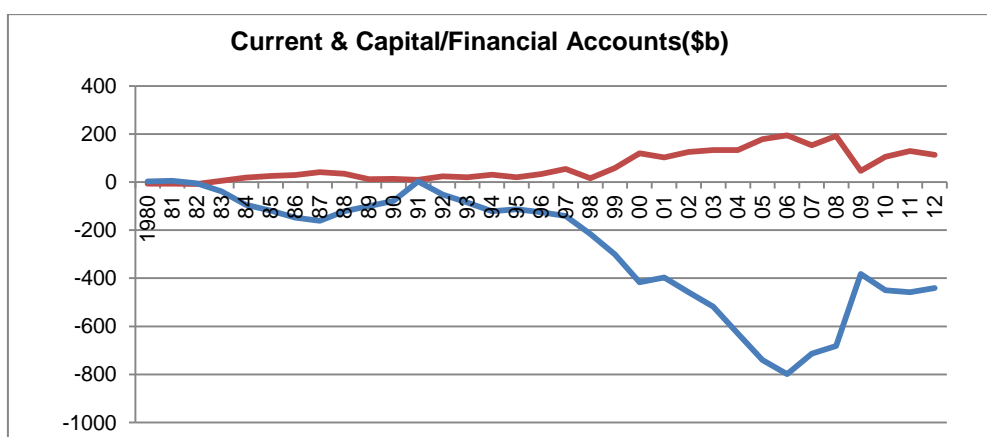
As shown in Table 1, Hojjat (2014) makes a rather robust projection of the U.S. current account balance and asserts that by 2020, the U.S. will have a slight surplus in that account.

As shown in Figure 6, the current account and capital accounts complement each other, i.e., *Capital Account = Function of Current Account*

**Table 1 – Projected U.S. Current Account Balance Using Time Series Data (\$b)**

2014	-193.22
2015	-149.36
2016	-105.5
2017	-61.64
2018	-17.78
2019	26.08
2020	69.94

Table 1 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.

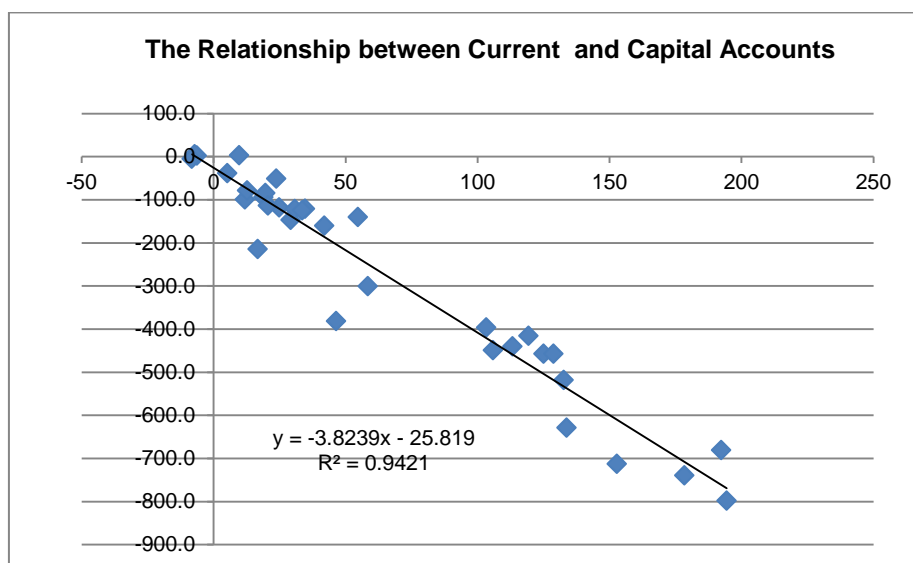


**Fig-6: Current Accounts Are Financed by Capital/Financial Accounts**

The above graph depicts the relationship between current account which is in deficit –the lower line – and the capital account which finances this deficit.

Source of Data; Bureau of Economic Analysis, September 2013.

Given this type of relationship, in this article, we can forecast the balance on the capital account into 2020.

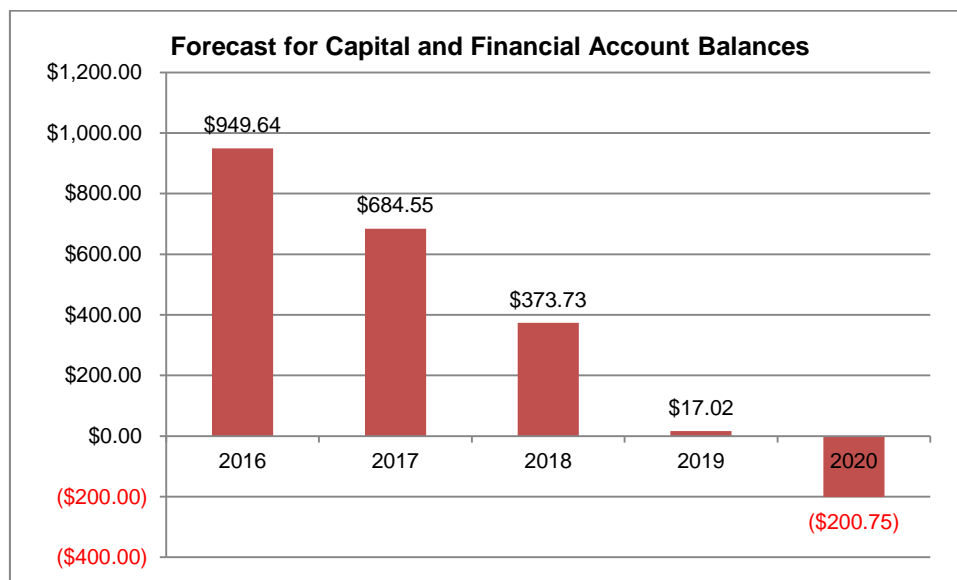


**Fig-7: Strong Relationship between the Two Accounts as Expected**

Figure 7 displays a regression line for the capital account as an independent variable and current account as independent variable. Since both of these two variables are in the balance of payments accounting, the strong relationship with over 94% R-squared and 21 for t-statistics should not be surprising.

Capital Account =  
 $-25.819 - 3.8239 (\text{Current Account}) (1)$   
 t- statistics (-21.96)  
 R<sup>2</sup> 0.94.21

Using the above equation and the forecasted values of the current account, the projected values of combined capital and financial accounts are shown below (Figure 8).



**Fig-8: 2016 through 2010 Forecast for Capital and Financial Account Balance (\$billion)**

Both time series and cross sectional forecast predict a shrinking surplus in the U.S. capital account and that is due to a robust improvement in the U.S. current account.

## RESULTS

Both cross sectional and time series projections reveal that the era of the U.S. reliance on foreign capital is coming to an end. The outlook for the U.S. capital account, as shown in Figure 8, displays a shrinking surplus. By 2020, the U.S. surplus in that account will disappear as its current account turns positive. This means that not only the U.S. will not need Chinese and other foreign capital to finance its deficit, but also that the U.S. could actually be in a position to finance the deficit of other countries.

### CONCLUDING REMARKS

The objective of this article is to project the U.S. capital and financial account using cross sectional and time series methods. This article shows that the improvement in the U.S. current account balance will have a positive impact on the U.S. capital and financial accounts. The times series and cross sectional projections clearly indicate that as we are nearing an inflection point in the projection of the U.S. current account deficit, the era of U.S. reliance on the foreign capital is coming to an end. One of the policy implication of this article is a recommendation to reform that US tax code so that the U.S. corporations have incentive to repatriate their profits rather than investing them abroad.

This research can also be expanded to include other balance of payments components, including its “statistical discrepancies”, which are expanding greatly. The historic shift also has policy implications: would the U.S. become less engaged in the global affairs?

### REFERENCES

1. Hojjat, M; Is a Brighter Future Waiting for the U.S. Current Account Balance? , Global Journal of Business Research, 2014; 8(5).
2. Irwin DA; Three Simple Principles of Trade Policy. American Enterprise Institute, Washington, D.C., 1996.
3. Howard, David H; Implications of the U.S. Current Account Deficit, Journal of Economic Perspectives, 1989; 3(4):153–165.
4. Kouparitsas M; Is the U.S. Current Account Sustainable?, Chicago fed Letter, June 2005.
5. Rafiq S; Fiscal stance, the current account and the real exchange rate: Some empirical estimates from a time-varying framework, Structural Change & Economic Dynamics, 2010; 21(4):276-290.
6. Helbling T, Nicoletta B, Roberto C; Globalization and External Imbalances, IMF World Economic Outlook, 2005; P109-156, International Monetary Fund.
7. Cavallo M, Cedric T; Current Account Adjustment with High Financial Integration: A Scenario Analysis, Federal Reserve Bank of San Francisco Economic Review, 2005; p. 31-45.  
<http://www.frbsf.org/publications/economics/revuew/2006/er-31-45.pdf>
8. Cavallo M; International Financial Integration and the Current Account Balance, 2006; FRBSF Economic Letter. Number 2006-14.
9. Amadeo Kimberly; The U.S. Current Account Deficit -- Threat or Way of Life?, About.com, 2012. Retrieved from [http://useconomy.about.com/od/deficit/i/deficit\\_threat.htm](http://useconomy.about.com/od/deficit/i/deficit_threat.htm)
10. New York Times; U.S. Quarterly Trade Deficit Was the Smallest in 14 Years, March 14, 2014. Retrieved from [http://www.nytimes.com/2014/03/20/business/us-current-account-deficit-is-smallest-in-14-years.html?\\_r=0](http://www.nytimes.com/2014/03/20/business/us-current-account-deficit-is-smallest-in-14-years.html?_r=0)
11. Bureau of Economic Analysis; September 19, 2013; Retrieved from Table 2a and Table 3a
12. Bureau of Economic Analysis (BEA) for 2013 data. BEA and Haver Analytics for 1985 data. Retrieved from Economic Review, Second Quarter 2013; page 33.
13. Available from [http://en.wikipedia.org/wiki/Capital\\_account](http://en.wikipedia.org/wiki/Capital_account), 2014