The Twin Deficits Are Back!

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Fidelity Fixed Income
Fidelity Investments
May 5, 2008
• **Unsustainable US deficits**
  – The current account deficit
  – The US saving shortfall
  – 9 challenges to “twin deficits” view

• **World Economic Outlook, 2008**

• **US financial & economic situation**
  – Risk pricing 2003-06
  – Financial crisis 2007
  – Recession 2008

• **Addenda**
  – More on US budget deficits: National Saving and How we got sold budget deficits
  – Three asset classes: Munis, Commodities, and Emerging markets
  – China: China’s long-run prospects, and Exchange rate policy
The unsustainable US deficits

1. The current account deficit
2. The US saving shortfall
3. 9 challenges to “twin deficits” view
Downward trend in US external deficits

Trade & Current Account Balances, 1960-2006

as Percentages of GDP
Trade deficit worries

• **Deficits hit record levels in 2006:**
  – Trade deficit and Current account deficit $\approx 6 \%$ GDP.
  – Would set off alarm bells in Turkey, Hungary, or South Africa.

• **Shorter-term dangers:**
  – Protectionist legislation: scapegoating China, rejecting FTAs.
  – Rising dependence on foreign investors $\Rightarrow$ possible hard landing for $\$

• **Long-term dangers:**
  – US net debt to RoW now $\approx 2 \frac{1}{2}$ trillion, and rising.
  – Indebtedness will lower our children’s standard of living.
  – Dependence on foreign central banks & SWFs
“Mainstream” View of Origins of US Current Account deficits

• Deficits are affected by exchange rates & growth rates.

• But those are just intermediating variables.

• More fundamentally, the US CA Deficit reflects shortfall in National Saving.
  – CA Deficit means that National Saving ($NS$) is insufficient to finance domestic Investment ($I$):
  – CA ≡ rate of increase of net claims against foreigners ≡ $NS - I$.
  – US CA deficit widened rapidly in 1981-87 & again in 2001-05, associated with falls in National Saving both times.
Figure 23.2. U.S. National Saving, Investments and Current Account

Net National Investment, Saving & Current Account, as shares of GDP

- Net Natl Saving (% of GDP)
- Net Domestic Investment (% of GDP)
- Current Account (% of GDP)
The US Current Account deficit originates in a National Saving shortfall:

both a rise in the Budget Deficit & a fall in Household Saving.

Currently net private saving goes to finance government deficits, so almost all net Investment is in effect financed by borrowing from abroad.

- Soft landing?
  - The landing doesn’t look soft so far!

- CA now on a sustainable path?

- After a 3-year pause, the US trade deficit will again start to deteriorate starting in 2010.

- US international debt eventually will climb to unsustainable levels.
Their projected trade and current account deficits deteriorate steadily after 2010.

Source: Bertaut, Kamin & Thomas (April 2008)
Thus the Net Debt deteriorates steadily and, with a small lag, Net Investment Income follows.

Source: Bertaut, Kamin & Thomas (April 2008)
So the path looking forward

• is for again-rising current account deficits;

• and the budget deficit is again rising rapidly.

• In other words, The Twin Deficits Are Back.
Nine Clever Reasons You Have Heard Why We Are Not Supposed to Worry About the US Twin Deficits


At http://ksghome.harvard.edu/~jfrankel/GrowthCommsnReasonsWorryDeficits.pdf
9 challenges to “twin deficits” view

1. The siblings are not twins
2. US investment climate
3. Low US household savings
4. Global savings glut
5. It’s a big world
6. Valuation effects will pay for it
7. US as the World’s Banker
8. “Dark Matter”
9. Bretton Woods II
1. “The ‘twin deficits’ view is wrong, because the budget and current account deficits do not always move in lockstep.” [1]

• This is a “straw man.”
• The term “twin deficits” does not mean current account & budget deficits *always* move together.
  – Nobody pretends that they do.
  – *Of course* BD & CAD can move in opposite directions, as in US investment boom of 1990s.
• *But in the 1980s & in the current decade,* U.S. fiscal expansion led to BD and CAD.

[1] Bernanke (2005) is one of many making this point.
2. Capital flows to US due to **favorable investment climate** & high return to capital.

- But
  - Even before the slowdown, US business Investment < Investment in 90s IT boom (or 60s, 70s, & 80s).
  - FDI is flowing *out* of the US not in.
  - The money coming into US is largely purchases of short-term portfolio assets, esp. acquisition of $ forex reserves.
Foreign central banks finance an increasing share of the US current account deficit

$ billions.  Source: US BEA & Treasury.  * Note: Increasingly, foreign CBs’ purchases of $ are not recorded as such.

<table>
<thead>
<tr>
<th>Year</th>
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<th>Δ US private assets abroad</th>
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<th>Δ Foreign official US assets*</th>
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<td>1063</td>
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<td>440</td>
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</table>
3. “A fall in **US private saving** has been as big a part of the fall in national saving as has been the budget deficit.”

- True
- But recall that Bush tax cuts were supposedly designed to be pro-saving (abolition of the estate tax, near-abolition of taxes on dividends & capital gains, etc.).
- That was the excuse for their regressivity.
- As the private saving rate has not subsequently risen, this is a further indictment of our current fiscal policy.
- The same characterization applies to the Reagan tax cuts of 1981: were supposed to boost saving but were instead followed by a fall in US private saving rates.

- True, foreign net lending to US is determined by conditions among foreign lenders as much as in US.

- “Savings glut” misleading: Global saving is not really up. [2]
  - Rather, global investment is down (even before 2008 slowdown).

- This pattern is inconsistent with the hypothesis that the exogenous change is an increase in saving abroad: that would have shown up as a rise in investment.

- The pattern is consistent, rather, with the hypothesis that the US shortfall is sucking in capital from rest of world.

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[2] Japan’s household saving rate = 7% of disposable income, vs. 23% in 1975.
True, overall saving/GDP outside US had by 2004 climbed to a level slightly > that of 1990s (while still < 1980s).
5. “It’s a big world.”

• Alan Greenspan, Richard Cooper, & others:
  world financial markets are big, relative even to $2 \frac{1}{2}$ trillion of US net foreign debt, and increasingly integrated.

• => Foreign investors can bail us out for decades.

• Foreign investors moving, even slowly, toward fully diversified international portfolios (away from “home country bias”), can absorb US current account deficits for a long time.

• True. **But**, for assessing default or country risk, global wealth may not be the relevant denominator.
If the US were any other country…

• The proper denominator of US debt would be
  – not the size of the world portfolio, but
  – US ability to pay
    • Measured by US GDP, or
    • By US exports or tradable goods production
      – Empirically, exports are the relevant denominator for crises
      – which is unfortunate, in light of low US X/GDP ratio

• US Debt/export path is probably explosive
6. US CA deficit need not imply rising debt & debt-service, due to valuation effects

• Lane & Milesi-Feretti (2005…) compute valuation effects.

• Gains in $ value of assets held abroad, particularly via $ depreciation, have largely offset increased quantity of liabilities

• => US net debt has risen “only” to $2 ½ trillion, despite much larger increase in liabilities to foreigners.

• But how many times can the US fool foreign investors?
7. US as World’s Banker

- Despite years of deficits, net investment income is still in surplus. Why?

- US earns higher rate of return on its assets abroad (especially FDI) than it pays on its obligations (especially T bills).
  - Gourinchas & Rey (2005): US is global “venture capitalist.”
  - Caballero, Farhi & Gourinchas (2007): “Intermediation rents…pay for the trade deficits.”
  - Forbes (2008): Money flows to US from places less-developed financially
  - Also theories by Mendoza, Quadrini & Rios-Rull (2006) and others
Composition: US assets give more weight to high-return equity & FDI than do US liabilities


Source: Gourinchas and Rey (forthcoming, 2006)
8. Dark Matter

• “That US Net Investment Income is still in surplus implies missing assets.”

• Cline (2005) calls the US an economic net creditor, though a net international debtor in an accounting sense.

• Hausmann & Sturzenegger (2006) call hidden US assets (know-how) that are not properly reflected in service export numbers “dark matter.”

• The argument probably overemphasizes the reliability of investment income data (relative to service export data)
  – Kozlow (2006): Dark Matter based on faulty interpretation of the data
  – Curcuru, Dvorak, & Warnock (2007): US capital gains on foreign securities are overstated, and so US international investment income is too.

- Deutschebank view (Dooley, Folkerts-Landau, & Garber, 2005…):
  - Today’s system is a new Bretton Woods, with Asia playing role that Europe played in 1960s.
  - That much is right.
  - DFL ideas were original:
    - China piles up $ not because of myopic mercantilism,
    - but as part of an export-led development strategy that is rational given China’s need to import workable systems of finance & corporate governance.
But it is not sustainable.

- It may be a Bretton Woods system, but we are closer to 1971 (date of collapse)
  - than to 1944 (date of BW agreement)
  - or 1958 (when convertibility was first restored).

(1) Capital mobility is much higher now than in 1960s.
(2) The US can no longer necessarily rely on support of foreign central banks, either economically or politically.
(3) China eventually will have to develop a workable domestic system of finance and corporate governance, or else suffer a domestic financial crisis.
“Dollar holders won’t sell because they would be only hurting themselves”

• This factor was just as true in 1973. In fact the governments holding $ then had an agreement not to sell (which is not true today).

• When the time comes, each central bank will be afraid that if it is the only one that doesn’t move out of $, everyone else will anyway, driving the dollar down, and leaving it “holding the bag.”

• Just as in any speculative attack.
Conclusion regarding sustainability of the deficits:

• The 9 arguments are clever, but I am not convinced.

• Some of these arguments rely on $ retaining its unique role in world monetary system forever.

• But the US may in the future no longer be able to count on the special privileges of our unique role as the lynchpin of the world monetary system.
The US & $ have had unique roles in global monetary system for more than 60 years.

- The French in the 1960s called it the *exorbitant privilege*: the rest of the world gives up real goods & companies in exchange for pieces of paper ($).

- Dollar has been unchallenged leading international currency
  - #1 reserve currency held by central bank
  - Also in other functions: invoicing trade & financial flows, etc.

- The US treasury security market has been the preferred liquid asset for private investors too.

- As a safe haven, US has benefited from flights to quality.

- US corporate governance, accounting systems, and securities markets have been considered superior to others’.
• But this special role could come to an end.

• The euro is now a credible rival, where the DM and ¥ were not.
Simulation of shares in central bank reserve holdings

Scenario: Assumes no entry of UK, Sweden, or Denmark into €;
& continued depreciation of $ at 2001-04 rate.

From Chinn & Frankel (2007)
Simulation of central banks’ holdings of reserve currencies

**Scenario:** Only accession countries join EMU in 2010 (UK stays out), but 20% of London turnover counts toward Euro financial depth, and currencies depreciate at the average 20-year rates up to 2007.

From Chinn & Frankel *(Int. Fin., 2008)*

![Graph showing the depreciation of currencies over time, with a tipping point in updated simulation: 2015.](image)
Possible geo-political implications

- Paul Kennedy (1989) may have been merely premature when he suggested that the US might go into geopolitical decline as a result of imperial overstretch.

- US could lose hegemony.

- By analogy with how Kindleberger (1995) & others were premature in 1990s when they saw the $ losing its place as #1 international currency to the ¥ & DM.

- It might be useful to think of reserve currency status as indicative of other respects in which we are losing soft power (many of them less easily quantified).
The 2000-2020 decline in international currency status for the $ would be only one small part of a loss of power on the part of the US. But:

- A loss of $’s role as #1 reserve currency could indeed in itself have serious geopolitical implications. 

- Precedent: The Suez crisis of 1956
  - is often recalled as the occasion on which Britain was forced under US pressure to abandon its remaining imperial designs.
  - But remember also the important role played by a simultaneous run on the £ and the American decision not to help the beleaguered currency.


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• World Economic Outlook, 2008

• US financial & economic situation
  – Risk pricing 2003-06
  – Financial crisis 2007
  – Recession 2008
Latest IMF forecasts (WEO, April) call for recession throughout 2008
The US is no longer the primary engine of growth in the world; emerging markets are!

IFM WEO, April 2008
### World Economic Outlook, IMF, April 2008

#### Table 2.1. Advanced Economies: Real GDP, Consumer Prices, and Unemployment

(Annual percent change and percent of labor force)

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<th>Real GDP</th>
<th>Consumer Prices</th>
<th>Unemployment</th>
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<td><strong>Euro area</strong></td>
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<td>France</td>
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<td>Japan</td>
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### Table 2.3. Selected Asian Economies: Real GDP, Consumer Prices, and Current Account Balance

(Annual percent change unless noted otherwise)

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<td>South Asia⁴</td>
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<td>India</td>
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<td>Pakistan</td>
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<td><strong>Newly industrialized Asian economies</strong></td>
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<td>Taiwan Province of China</td>
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<td>Hong Kong SAR</td>
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The US Economic and Financial Situation

• Market under-pricing of risk in 2003-2006, and the recent correction

• Spread of sub-prime mortgage market crisis in 2007

• US Recession in 2008?
The markets in 2003-06 under-priced risk.

- Options prices were too low (e.g., Vix)
- Bond spreads too low
  - Corporate (esp. junk bonds)
  - Banking (securitized mortgages)
  - Term structure (Greenspan’s “conundrum”)
- Asset prices generally too high
  - Real estate
  - Equities
  - And, I would have said, bonds

- Why?
  - Excess liquidity: Easy monetary policy since 2001
  - Under-perceived risk: Lagged variances were simply plugged into pricing formulas, rather than trying to be forward-looking.
How risk should have been priced:

• A forward-looking analysis would have noticed an unusually high set of major possible risks to the economy:
  – Crash of housing market bubble
  – Hard landing of $
  – Oil prices reach $100 a barrel
  – Serious geopolitical instability, esp. from Mideast
Under-pricing of risk

• Reasonable a priori odds would have been:
  20% chance of each happening, per year =>
  – Odds of making it through one year
    with no crisis ≈ 41% (=.84) =>
  – odds of making it through 3 years
    with no crisis ≈ 7% (=.41^3).
  – (True odds were somewhat better
    if events were positively correlated.)

• Since mid-2007, we have seen the correction.
One aspect that nobody foresaw:

• The collapse of the sub-prime mortgage market led to freezing of liquidity in mainstream areas such as bank loans, commercial paper, and auction rate securities.

• That is not supposed to happen, in just about any model of modern financial markets.
Spreads paid by banks since summer 2007

Bank spreads shot up as high as 100 basis points, despite low default risk
Five possible conclusions from the chart.

• Bank spreads shot up abruptly last August, & remain high (having come down twice, but relapsed twice). Banks are remarkably reluctant to lend to each other.

• 2nd, the three lines overall move closely together: even though the interbank market has broken down, the banking system internationally is as tightly linked as ever.

• 3rd, one might nevertheless use differences among NY, London & Frankfurt invidiously to pass judgment on how well the three central banks have handled the crisis.

• 4th, up until mid-April LIBOR was understating banks’ costs of borrowing. Improved accuracy in LIBOR then added to the cost of capital in the markets.

• Most recently, some now see the worst passing.
Lessons? ¹/

• “Originate to distribute model” of mortgages -> CDOs is inherently flawed (despite the advantages of pooling):
  – due to asymmetric information
  – => no incentive for banks to ascertain creditworthiness.
  – Originators & securitizers should be required to retain a share of mortgages.

• Consumer protection regulation should prevent the most unreasonable mortgages (no down payment, teaser rates, NINJNA, etc.).

• One can’t rely on either
  – rating agencies (in part due to conflict of interest) or
  – self-applied risk analysis (Basel II)

• Capital requirements should be applied to SIVs & other off-balance sheet entities

¹/ e.g. along lines suggested by Alan Blinder, Barney Frank, and others
The financial crisis is reminiscent of two disruptions in earlier decades,

- featuring the same temporary disappearance of liquidity in what were supposed to be some of the most liquid markets in the world:
  - the stock market crash of 1987 (portfolio insurers couldn’t sell stocks)
  - the LTCM crash of 1998 (LTCM couldn’t sell off-the-run Treasuries)
Consequences?

• Very upsetting to people who trade in financial markets or write textbooks for a living.

• But neither the 1987 market crash nor LTCM crisis had discernible negative impact on the real economy.
  – In both cases, recessions came only 3 years later.
  – Also, gaps were filled by
    • fortuitous lagged response of 1987 US exports to $ depreciation.
    • And IT-led investment boom in late 1990s.
Will we be so lucky this time?

• The collapse in housing prices would have had a big impact on the real economy regardless of the liquidity crisis:
  – recession in construction industry
  – fall in US consumption
    • Household saving rate was already 0, bound to rise;
    • due to bursting of asset bubbles (equities and housing)
  – defaults on interest-only and conventional mortgages

• Financial troubles have already lasted longer than 1987 or 1998.
Precedents, continued

• The late-1980s S&L crisis may be the best parallel.
  – It probably contributed to the 1990-91 recession.
  – Ultimate cost of the crisis is estimated to have totaled around $160 b.,
    • about $125 billion of which directly was paid by USG

• To be avoided:
  the parallel of Japanese banks in 1990s.

• Lesson:
  write down bad debts (“mark to market”) as quickly as possible, rather than artificially propping up financial institutions.
U.S. Recession

• Has a recession already started?

• One never knows for sure, until well after the fact.
  – Statistics lag, point different directions, and are revised.
  – NBER BCDC typically takes a year to make the call, because we view our job as waiting until we are sure.
  – E.g., we did not call the March 2001 recession until Nov. 2001.

• Odds of a 2008 recession are high – possibly already started in first quarter --.
Definition of recession

• Not two consecutive quarters’ negative growth.
  – For example, the negative GDP growth of the 2001 recession was in the 1st and 3rd quarters;
  – 2nd-quarter growth appeared positive.

• Recession is what NBER Business Cycle Dating Committee says it is.
The last recession was short & mild…

NBER BUSINESS CYCLE REFERENCE DATES

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<th>Peak</th>
<th>Trough</th>
<th>Duration in Months</th>
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<td>March 1975 (I)</td>
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<td>Jan. 1980 (I)</td>
<td>July 1980 (III)</td>
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<td>July 1981 (III)</td>
<td>Nov. 1982 (IV)</td>
<td>16</td>
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<td>July 1990 (III)</td>
<td>March 1991 (I)</td>
<td>8</td>
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<tr>
<td>Mar. 2001 (I)</td>
<td>Nov. 2001 (IV)</td>
<td>8</td>
</tr>
</tbody>
</table>

Average, all cycles:

- 1854-2001 (32 cycles): 17, 38
- 1854-1919 (16 cycles): 22, 27
- 1919-1945 (6 cycles): 18, 35
- 1945-2001 (10 cycles): 10, 57

… compared to 1854-1919 average or 1973-75 or 1981-82.
How does the NBER BCDC make its decisions?

• We do look at quarterly GDP.
  – As of 4/30/08, we have not yet had a single negative number
  – Advance estimate for QI was +0.6%
    • A normal-sized revision could turn this number negative (or double it)
    • Even if +0.6% holds, it can be entirely explained by (unwanted) inventory accumulation.
      – Final demand fell in QI
      – Firms will probably want to reduce inventories in QII
      – Could offset stimulus from tax rebates.

• But we look not only at GDP. Why?
  – GDP subject to measurement error and revisions
  – We need monthly dates for the turning points
We look beyond GDP data

– Employment data are important, because they cover the whole economy and are timely
  • Establishment series, not household survey
  • My personal favorite is “total hours worked.”

– We also traditionally look at other variables:
  • real personal income, sales, & industrial production;
  • but we now de-emphasize the latter two due to reduced share of manufacturing.
Employment (BLS establishment series): peak in March 2001 helped us call the start of the last recession; but jobs continued to decline for 2 years after trough, Nov. 2001
Rate of Change of Employment

Sharp declines in March & Nov. 2001 happened to mark, not just start of recession, but also the trough. Entered negative territory again in Jan.-April 2008.
Why Are Workers Unhappy, With Only 5.0% Unemployed So Far?
“Discouraged workers” have left the labor force.

The ratio of US employment to population
Monthly data from Jan 1990 to April 2008

Population: civilian non-institutional, 16 years of age and over
• Employment rose between the years 2003 and 2007.
• But it barely stayed ahead of population growth. It did very little to make up for the decline in jobs equal to 2-3% of the population that had taken place in 2001-2002.
• The labor force participation rate normally rises in a boom, as good labor market conditions lure workers,
• as in the record 1992-2000 expansion.
• But it did not happen during the most recent expansion.
• To the contrary, the labor force participation rate was at a minimum in 2007, the peak year of the business cycle.
• As a result, employment as a share of the population was well below what it had been at the preceding business cycle peak year (2000).
• The fraction of Americans with jobs shows a fall from 64.7% to 62.6%, which translates to 5 million missing jobs!
If recession comes, how bad will it be?

• On the optimistic side,

  – Aggressive monetary expansion
    • Unprecedented interest rate cuts,
      – 3 ¼ % cumulative

  – Aggressive fiscal expansion
    • The tax cuts’ demand-intensity is unprecedented in Bush Administration history
      – whose tax cuts have hitherto excluded lower-income Americans, where both marginal propensity to spend & effective marginal tax rate are the highest.

    • The bi-partisan cooperation to pass it quickly surprised all.

  – Exports rising rapidly
If recession comes, how bad will it be? cont.

• **On the pessimistic side,**
  
  – Household balance sheets are weak  
    => the saving rate is likely to rise (from 0), so we cannot rely on the American consumer for demand expansion,
    • as since 2000  
    • Stock market and real estate bubbles of 1996-2006 now over.
  
  – There are limits to how far the Fed can cut interest rates, compared to 2001.  
    4/30 move already brings \( i \) from 5 ¼ % to 2 %.  
  
  – There are limits to how far the government can cut taxes, compared to 2001.  
    Budget deficit path is already widening.

• **Implication:**
  a 2008 recession would probably be > 2001 recession.