

Memorandum

To : FORUM Staff
From : BW
Copy to :
Date : February 9th, 2011
Subject : Macro Dashboard Q IV 2011

1. Summary of Results

1.1 Profits and Valuations

In Q IV 2011 **US Corporate profits** have dropped, reducing the positive deviation from the **long-term averages**

- a) **to 5 – 20%**
- b) Down from 20 – 35% in Q I 2011.

At the same time the steep drop in equity prices in Q III 2011 has reduced the degree of overvaluation relative to the historical averages:

- a) **Now at ca. 5-25% with the mean at ca. 20%.**
- b) Down from a mean of ca. 30% at the end of Q II 2010.

This implies an **interpolated mean of ca. 1,0 standard deviations.**

As a result **expected real returns from US equities continue to be below their historical average of 6,3% p.a.** History suggests **real returns of 3 – 5% p.a. in next 5 – 10 years.**

1.2 Risks

We still see most of the general risks we have been pointing towards in past newsletters, e.g. a structural weaknesses in consumer spending in the USA, the China investment bubble and the risk of protectionism.

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Clearly, the European sovereign debt issue has shot to prio 1 by now. It is deeply interlinked with a crisis of the European financial system which in turn affect the real economy. We see a high probability that the train of events will unfold in a very negative way with even the € currency at risk.

In terms of outcome we believe the outcome will be very negative for equity markets.

1.3 Range of Outcomes

The downside risks clearly are more significant than the upside risks, both in terms of probabilities and outcomes. This is the result of both profit levels and valuations still starting from a high base.

1.4 Conclusions and Recommendations

We have left our major recommendations for top-down asset allocation largely unchanged:

- Holding a **standard share of 20% cash** to be able to take advantage of future opportunities
- **A 5 – 10% short exposure.** We propose to limit the short strategy to “autonomous shorts” will have a high probability of declining share prices independent of equity markets.

As a result we target a net equity long exposure of ca. 70 - 75%.

2. Purpose of this Paper and Conceptual Basis

Please see our Macro Dashboard of Q IV 2010 for a summary.

3. Status of the Profit Cycle

3.1 US After-Tax Corporate Profits as % of GDP (Appendix 3.1)

In Q III 2011 **US after-tax Corporate Profits** recovered slightly from the dip observed in Q II 2011: to 6,9% from 6,4%.

This implies a **ratio of 136% of its 80-year average** which stands at 5,1%.

US after-tax Non-Financial Corporate Profits – eliminating the volatility of banking profits – also recovered from the steep drop in Q II 2011 and increased to 5,1% from 4,2% in Q II 2011.

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The eighty-year mean is 4,1%. Thus in Q III 2011 US after-tax Non-Financial Corporate Profits stood at **122% of the long-term average – indicating a slight positive deviation.**

3.2 US Corporate EBITDA (Appendix 3.2)

The second metric we use for assessing corporate profitability is **US Corporate EBITDA** (Net Operating Surplus plus Consumption of Fixed Capital divided by Gross Value Added). It eliminates any distortions from changes in interests or taxes.

As you can see from the **Appendix 3.2** we get similar results as outlined in the chapter above:

- a) In Q III 2011 **Corporate EBITDA stood at 33,5%**, starting to increase again after three quarters in a row. This is the highest level ever reached after the beginning of this time series in 1929.
- b) As the **80-year average stands at 27,3%** the latest level of **33,5%** implies a ratio of **123%**.

3.3 Pre-Tax Non-Financial ROA (Appendix 3.3)

Pre-Tax Return on Tangible Assets (“ROTCE”) of the US Non-Farm, Non-Financial sector (as reported by the Federal Reserve) rebounded to the high level reached in 2006: in Q III 2011 it stood at 7,0%, down from the 7,4% reached in Q II 2011.

The **long-term average since the first publication of this time series in 1965 is 5,8%**. Thus this measurement of corporate profitability stood at ca. 121% of its long-term average – in line with the other two profit metrics outlined above.

3.4 FORUM Conclusions on Profitability

Below please find a summary of the four metrics for corporate profitability compared with their respective averages and with historic deviations:

Metric	% of LT Average	Standard Deviations
Total Profitability as % of GDP	136%	0,92x SD
Non-Fin. Profits % of GDP	122%	0,71x SD
Corporate EBITDA Level	123%	2,41x SD
Non-Financial ROA	121%	0,73x SD.

Overall the degree by which profit levels exceed their historic averages **has increased again since the last quarter.**

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When viewed together, the four metrics for corporate profitability in Q III 2011 show a **reasonably consistent picture of a positive deviation of ca. 21 – 36% from their averages with the median positive deviation at ca. 22%.**

In terms of **standard deviation** the different metrics show more scatter due to their different implicit volatilities. The median has dropped to < 1,0x. This implies “normal” conditions in the profit cycle.

4. Valuations

4.1 Cyclically Adjusted PE Ratios/Shiller’s CAPE (Appendix 4.1)

For a **tops-down calibration of valuations we prefer Shiller’s CAPE**, a metric introduced in his 2000 book “Irrational Exuberance”. It eliminates short-term earnings fluctuations by calculating a 10-year average, inflated to today’s purchasing power based on the GDP deflator. It is calculated based on all constituents of the S & P 500. We will refer to it below as Shiller’s Cyclically-Adjusted Price Earnings Multiple (“**Shiller’s CAPE” or just “CAPE”**).

Prof. Shiller reports a **CAPE of 21,9x for February 1st, 2012**, his latest update. On that date the S&P 500 stood at 1.324,09. This is an increase of ca. 10% from a CAPE of 19,8x reported as of September 26th, 2011, the time of our latest report with the S&P 500 at 1.162,95.

The long-term average of CAPE since 1881 stands at 16,4x. This implies that **current valuations are at 134% of their long-term average.** In terms of deviation from the past this valuation implies a moderate **standard deviation of 0,71x** – up from 0,52x in our latest report. **Thus it is approaching again the level of “significant overvaluation” already reached at the end of Q IV 2010, i.e. before the market correction in 2011.**

4.2 Tobin’s q

Tobin’s q is a ratio of the **value of the stock market relative to the replacement cost of net assets.**

The application of Tobin’s q to equity market valuations has been introduced by authors Smithers and Wright in their 2000 book “Valuing Wall Street” and updated by Andrew Smithers in his book “Wall Street Revalued” published in 2009. For a validation we refer to an article by Harney/Tower in the Jan. 2nd 2003 edition of The Journal of Investing. Please note that **q is only calculated on non-financial companies.**

There are two generally accepted methods to calculate this ratio:

- the US Federal Reserve Flow of Funds accounts
- Smithers & Co consultants who apply an adjustment.

There are also numerous additional versions published by consultants and market participants, thus you may get diverging data.

4.2.1 Non-adjusted Tobin's q

Based on the latest **US Federal Reserve Flow of Funds** as of September 30th, 2011 **the non-adjusted ratio has dropped slightly to 0,82 at the end of Q III 2011**, down from 1,01 as of June 30th, 2011. The non-adjusted average observed since 1900 based on our calculations is 0,76, **thus q is at 108% of its long-term average**. This corresponds with **0,19 Standard Deviations**. (We used to calculate this ratio based on a published average of 0,63 for q, but cannot replicate this number. We have therefore decided to switch now to the number of 0,76 which is based on our own calculations.)

After extrapolating for the increase in the S&P 500 to 1.257,60 on December 31st, 2011 from 1.131,42 as of September 30th, 2011, i.e. for an increase by 11%, **the level of q including statistical discontinuities decreases to 120% of its long-term average**.

4.2.1 Adjusted Tobin's q

Smithers & Co. adjust Tobin's q as reported by the Fed for statistical discontinuities beginning in 1983, mainly revaluations of fixed assets to market values beginning in 1984. At the end of Q III 2011 **q ex statistical discontinuities (line 20 of Table R 102) stood at 1,33**, down by nearly 1/5 from 1,67 at the end of Q II 2011. Based on the long-term average of 0,88 this implies **a level of 151% of its long-term average resp. 1,00 standard deviations**.

After adjusting for the decrease in the S&P 500 by 11% as outlined above **the overvaluation of q ex statistical discontinuities as of December 31st, 2011 increases to 168% of its long-term average of 0,88**.

4.3 US Equity Market Capitalization as % of GDP (Appendix 4.3)

Based on the Fed data US market capitalization as % of GDP **stood at 101%** at the end of Q III 2011, down significantly from 122% at the end of Q II 2011.

As the long-term average since the beginning of this time series is 80% this valuation implies **a premium of ca. 21% which corresponds to 0,64x standard deviations**.

Increasing this ratio by 11% to account for the drop in the S&P since September 30th, 2011 as the most significant index entering total market cap yields **an adjusted value of 112% of GDP as of December 31st, 2011 – implying a overvaluation of 40% above its historic average**.

4.4 Qualitative Indicators for Overvaluations

In the last two issue of the Macro Dashboard – covering the situation at the end of Q III 2011 - we reported that fear had returned to the markets and indicators for risk had gone up significantly.

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Since then the “risk off” mentality has returned in full: we are observing qualitative signals of an overvaluation, e.g. a strong stream of IPOs, some of them of questionable quality and a lot of enthusiasm for US technology stocks. In the first week of February 2012 the NASDAQ index has reached an 11-year high.

This trend has continued well into 2012 with most European markets up by ca. 15% since the beginning of the year.

4.5 Correlation of Valuations

As is typical for a “risk off market” driven by liquidity and momentum correlations between most asset classes have gone up again to new highs.

Within the equity market we see not much differentiation between sectors. In particular we cannot detect sectors which are out-of-favor.

4.6 FORUM Summary and Conclusions

Below please find a summary of the level of valuation metrics compared with their long-term averages and standard deviations **as of December 31st, 2011 for the USA:**

	% of LT Average	Standard Deviation
Shiller’s CAPE	134%	0,71x SD
Tobin’s q non-adjusted	120%	0,19x SD
Tobin’s q adjusted for discontinuities	168%	1,00x SD
US Equity Market Cap. as % of GDP	140%	0,64x SD ¹ .

These data suggest that US equity markets are **overvalued by 20 – 40%** (eliminating Tobin’s adjusted q as an outlier). **The interpolated mean of all four metrics is an overvaluation by ca. 30%.** This reflects the increase in the stock market indices since our last meeting, when the overvaluation was ca. ca. 20%.

Similarly **standard deviations have increased, with the interpolated median of all four metrics now at ca. 0,7x.** By our definition this implies that markets are moving into the zone of “mild overvaluation”.

4.6.1 Implications for Expected Long-Term Returns

¹ All SD calculations are based on end of previous quarter numbers.

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If one believes in the Mean-Reversion characteristics of valuation the most likely assumption on expected returns on equities in the next 5 – 10 years would be **returns below long-term averages. The long-term real return of the US equity market since 1900 including dividends has been 6,3% p.a.** The most likely expected return will depend on the time it takes for this **overvaluation of with a mean of ca. 30%** based on the four metrics analyzed above to unwind:

Years for Unwinding	Real Return p.a.
2	negative
5	0 - 2%
10	2 – 4%.

Based on a standard deviation of 0,7x our statistical exercise – **correlating standard deviation** of Shiller´s CAPE with subsequent **nominal** returns without dividends, see **Appendix 2.2** - would suggest **nominal returns of**

- a) **ca. 2,8% p.a.** in the next 5 years
- b) **ca. 4,1% p.a.** in the next 10 years.

Assuming a long-term inflation rate of ca. 2% p.a. and dividends at the same rate **real total returns from equities would be the same. i.e. 1 - 2% p.a.**

GMO – an asset manager whose approach we share in many respects – **in their 7-year Asset Class Return forecast as of January 31st, 2012 expect real returns of**

- a) **-1,5% p.a. for US smallcap**
- b) **0,8% p.a. for US Large caps.**

This is in line with our expectations.

As our investment results will always be based on the return of equity markets in general plus an annual outperformance of 5 – 10% p.a. created from our investment approach **these expected market returns make it very difficult for us to reach the targeted 15% p.a. return in equity markets of mature economies.**

5. Risks to US Profits and Valuations

In this chapter we focus on **trends and constellations in the US economy which appear unsustainable to us.** We have explained our concerns in the last few Macro Dashboards, they are mainly centered around

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- a) **Stagnating resp. decreasing real Median Household Income** – most of the additional income created in the last decade has gone to the top 1 – 10% of top earners.
- b) **Stagnating real Market-based income and purchasing power** – purchasing power is maintained by government transfer payments – which in turn create an unsustainable rate of increase in government debt.
- c) A very **slow process of deleveraging in the household sector**. At the end of Q III 2011 the level of household debt/GDP dropped to 87,0% from 88,3%. This is just 1/10 lower at the peak reached before the outbreak of the financial crisis in 2007.

Total debt of all sectors resumed its growth to 354% of GDP, up from 350% at the end of Q II 2011. This is still largely unchanged from the peak level of 362% at the end of 2007 when the financial crisis began.

We are still worried that the US economy is trading water by substituting government debt for household debt. This makes corporate profits – particularly at the elevated levels reached by now – exposed to setbacks.

We feel that this has not been fully realized by investors. Most of the investor sentiment is determined by the chase for yield above the lowly short-term money market rates – which makes most asset classes look attractive.

6. Other Risks

6.1 Overview

In the last Macro Dashboards we discussed the following risks:

- a) **Sovereign Debt:** We see this as the most important short-term risk in Europe, and a significant mid-term risk in the USA and Japan in the medium term. We are discussing our views on the European perspective in a separate chapter below.
- b) **The China investment bubble:** history suggests strongly that any long period of expansion based on a share of investments in GDP of more than 50% will eventually lead to massive capital misallocations and tends to correct itself with a sharp bust.

We do not know when this will happen, but **historical evidence lets us put a rather high probability of this event happening.** We believe the outcome will be moderate to the world on average, but hit certain industries and companies very hard.

- c) **Trade wars:** historically this has tended to be an answer of politicians to problems at home.

This risk is latent and **at this point in time probabilities appear to be low.** On the other hand the outcome of such an escalation will be devastating to the world economy. We will observe closely whether the planned legislation of the USA with respect to currency manipulation (means: China) may trigger an outbreak of protectionism.

6.2 Main Risk Today: European Sovereign Debt

The European debt crisis has been going on for at least a year by now. Our main thinking around it is:

- a) We are amazed at the **unwillingness of politicians in many countries to tackle the deficit**. E.G. Greece which is with its back against the wall struggling to pay its monthly salaries has reduced the subsidies for renewable energy gradually. The resulting tariffs are still allowing operators one of the highest IRRs in Europe.

Conversely there are few politicians like the new Spanish government which has stopped any subsidies completely until it has reviewed the situation.

In the last Macro Dashboard we cited an article by Mr. Daas who compared the accounting sheenigans of politicians with the private sector: no investor would have any confidence in a private sector undertaking using off-balance sheet instruments and non-transparent financial gearing. **Similarly, we can only develop confidence in politicians who handle the present crisis as a business leader would do: decisively and fast.**

- b) The indirect effect of the government debt problems is the **associated deleveraging of the banking sector**. The team around Huw van Steenis at Morgan Stanley has tried to quantify the amount of balance sheet shrinking which European banks are embarking on in order to
 - a) reach required capital ratios
 - b) digest increasing write-downs on their holding of European sovereign debt
 - c) prepare for the required re-financing of €1.700bn in bonds in the next three years.

They arrived at a range of €1.500 to 2.500bn in the next three years.

We are afraid that this will lead to a significant reduction of credit to the corporate sector, in particular in countries with a weak banking system – which need overseas banks to do the lending. **This is in particular Italy and to a lesser extent Portugal. It also affects many Emerging Markets.**

As a result we expect that the European economy will show very low growth overall.

7. Conclusions

7.1 Expected Economic Conditions and Equity Returns

In summary we draw the following conclusions:

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- a) We should assume that **Average Future Conditions** of the economy will be not as good as in the last up-cycle which I would time from 2003 – 2008.
- b) **Based on valuations of equity markets overall equity returns in the next 5 – 10 years** in the mature economies should be assumed to be below their long-term averages. An expectation of **1 - 2% p.a. in real total terms for equities respectively 3 – 4% in nominal terms (assuming LT levels of inflation)** appears realistic.

7.2 Range of Potential Outcomes

We believe that there is a significant tail-end risk that the economy will get into a double-dip recession as the structural impediments to higher growth in the developed countries have not been addressed yet.

Given the level of corporate profits – which is still significantly above historical averages – the risk of a positive surprise on profits is a much lower.

8. Recommendations

8.1 Net Equity Exposure

Overall we have left our recommendations largely unchanged. As a consequence we should

- target a cash quota of 20% of AUM
- keep a short position of 5 – 10% of assets.

8.2 Recommendation by Asset Classes

8.2.1 Quality Businesses/Long-Term Compounders

Valuations are mostly above fair values. At the present prices we see little short-term opportunities. Our watchlist Prio 1 – candidates with attractive valuations - has shrank again to 1 – 2 candidates. We are using the time to replenish our watchlists Prio. 2 and 3

8.2.2 Special Situations/Merger Arbitrage

We looked at some opportunities, but did not come within striking distance.

8.2.3 Relative Value/Pairs Trade

We continue to seek candidates for long/short pairs trades.

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8.3 Hedging Risks I: US level of Corporate Profitability and Valuations

In the last Macro Dashboard I reported that we had discontinued our strategy to compromise with “relative shorts”, but rather required that any new short position would have to be an “autonomous short”.

As a result of this tightening of standards we have not added any new positions.

8.4 Hedging Risks II: European Sovereign Default

8.4.1 Banks as a Surrogate for Sovereign Default Risk

In the last Macro Dashboard I discussed the option of shorting a basket of European banks as a hedge against government default. In the end we decided against this as we felt that this sector was outside of our Circle of Competence.

The massive recovery in bank shares at the beginning of 2012 would have created massive short-term losses for such a strategy. It is too early to judge the final outcome.

8.4.2 Other Hedges

We continue to believe that the best “insurance” against sovereign defaults or the aftermath of a large financial crisis are **investments in quality Franchise Businesses acquired with a Margin of Safety.**

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Appendix 2.2: Historical Relationship between Standard Deviations and Returns for CAPE

Stock Market Return as a Function of # Standard Deviations from Average PE/ 10

Status as of November 2nd 2010

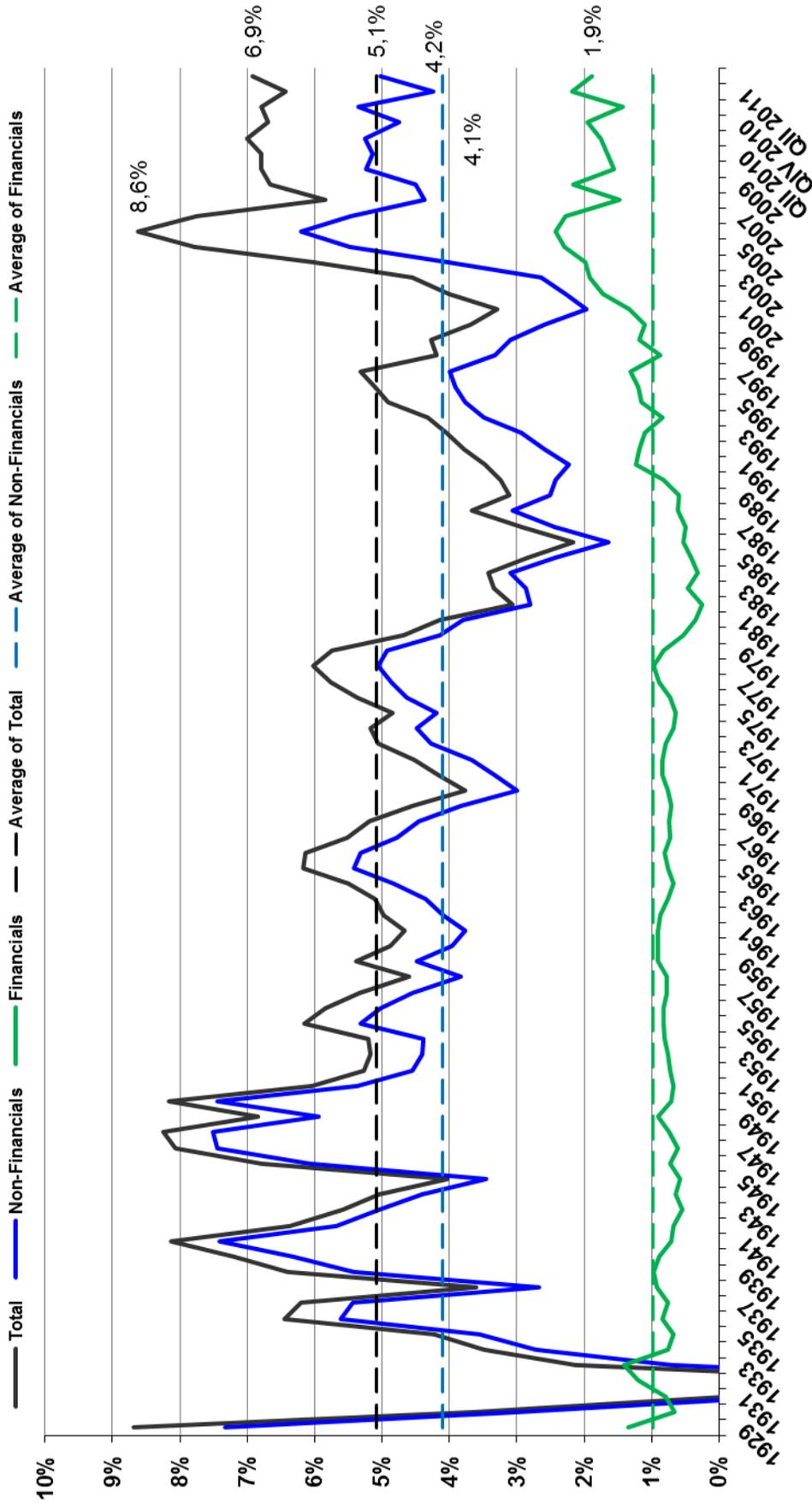
	Deviation from average as a # of standard deviations	# months	Nominal return		
			2 years	5 years	10 years
Negative deviations	Less than -3	1	14.5%	5.2%	9.9%
	Between -3 and -2	79	5.3%	4.8%	7.0%
	Between -2 and -1	294	7.8%	7.8%	4.6%
	Between -1 and -0.5	226	10.5%	6.8%	6.6%
	Between -0.5 and 0	159	7.8%	5.3%	6.3%
Positive deviations	Between 0 and 0.5	169	2.1%	3.6%	5.6%
	Between 0.5 and 1	178	2.1%	2.8%	4.1%
	Between 1 and 2	297	1.6%	3.8%	2.5%
	Between 2 and 3	71	1.1%	1.7%	2.3%
	More than 3	56	0.0%	-2.7%	-0.1%
Total		1530	5.0%	4.8%	4.7%

Period covered: 1881-2010

Source: Shiller, FORUM Research

Appendix 3.1: Corporate Profits as % of GDP

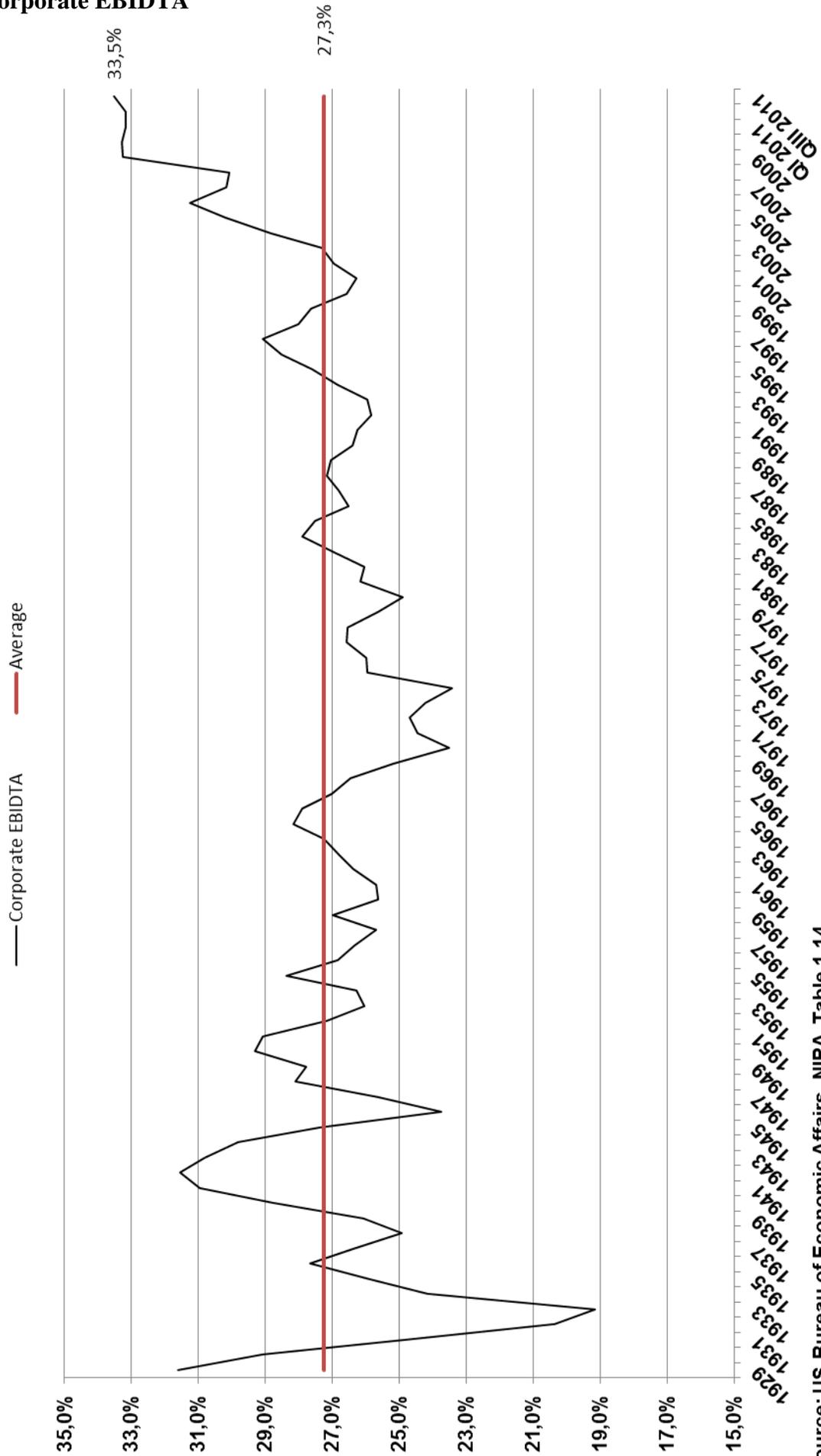
US Corporate Profits as Share of GDP QIII 2011: 6,9%



Source: US Bureau of Economic Affairs (BEA), NIPA Table 1.14

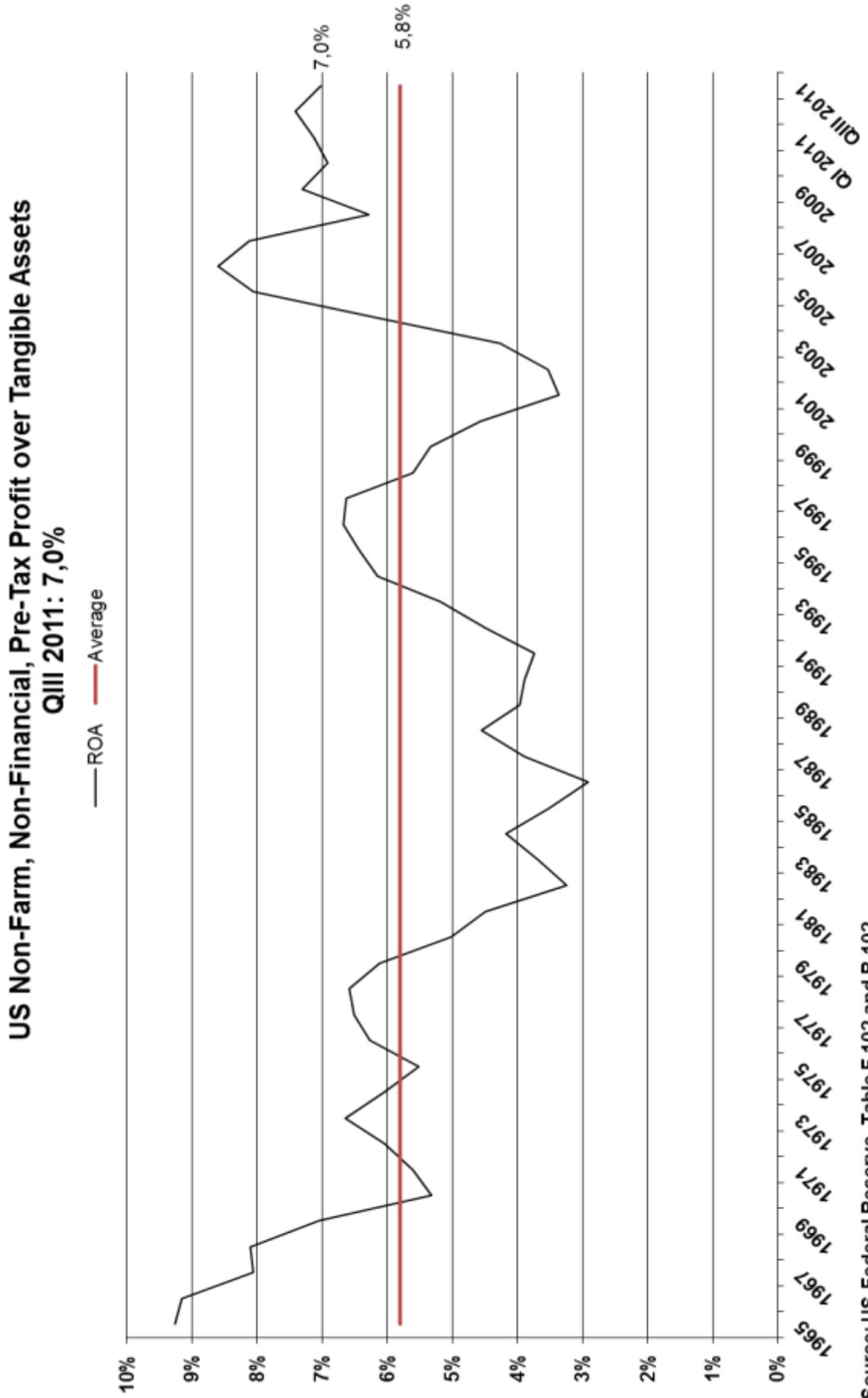
Appendix 3.2: Corporate EBIDTA

**US Corporate EBIDTA as % of Value Added,
QIII 2011: 33,5%**

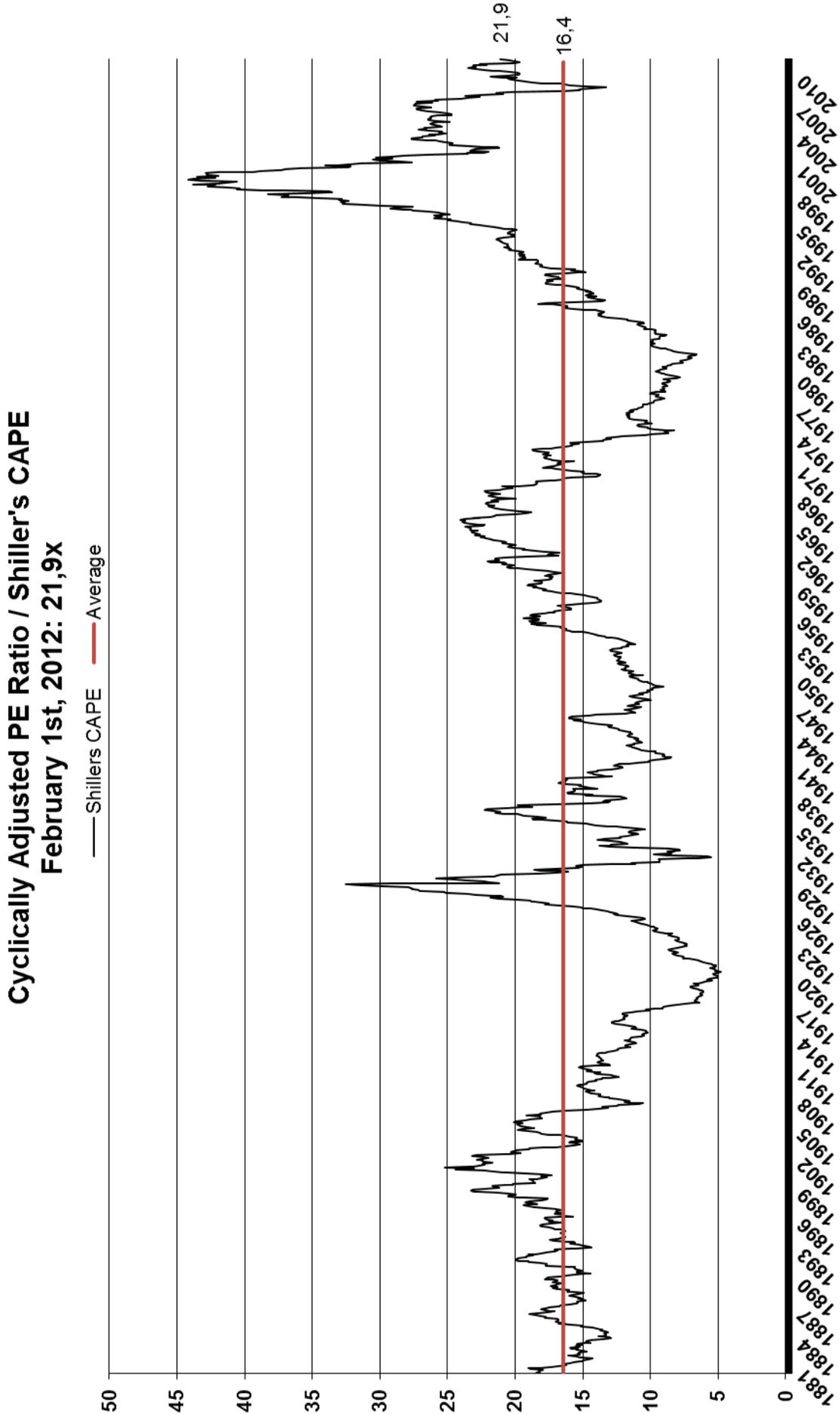


Source: US Bureau of Economic Affairs, NIPA Table 1.14

Appendix 3.3: Corporate Profitability Measured as ROA

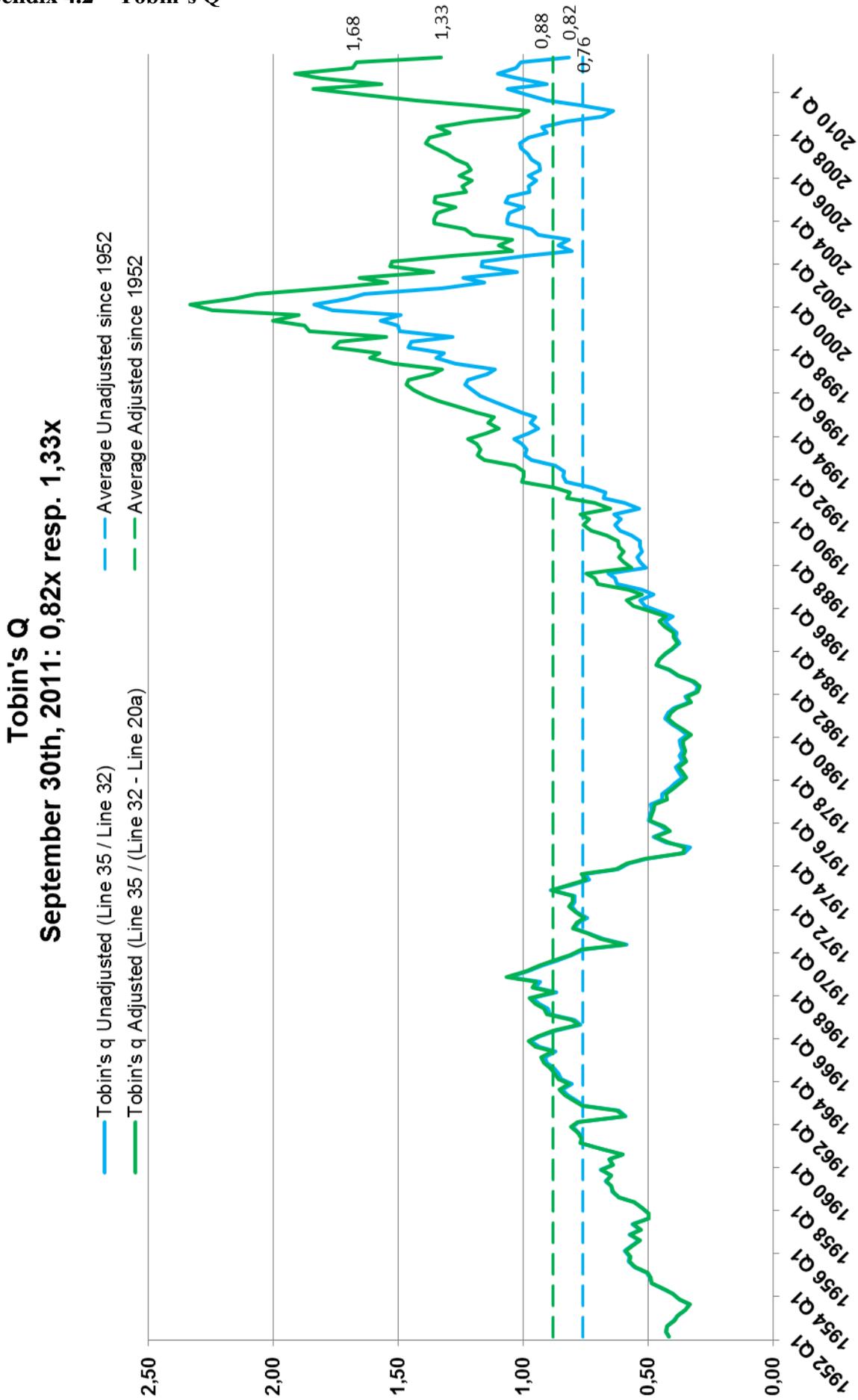


Appendix 4.1: Cyclically Adjusted PE Ratios/Shiller's CAPE



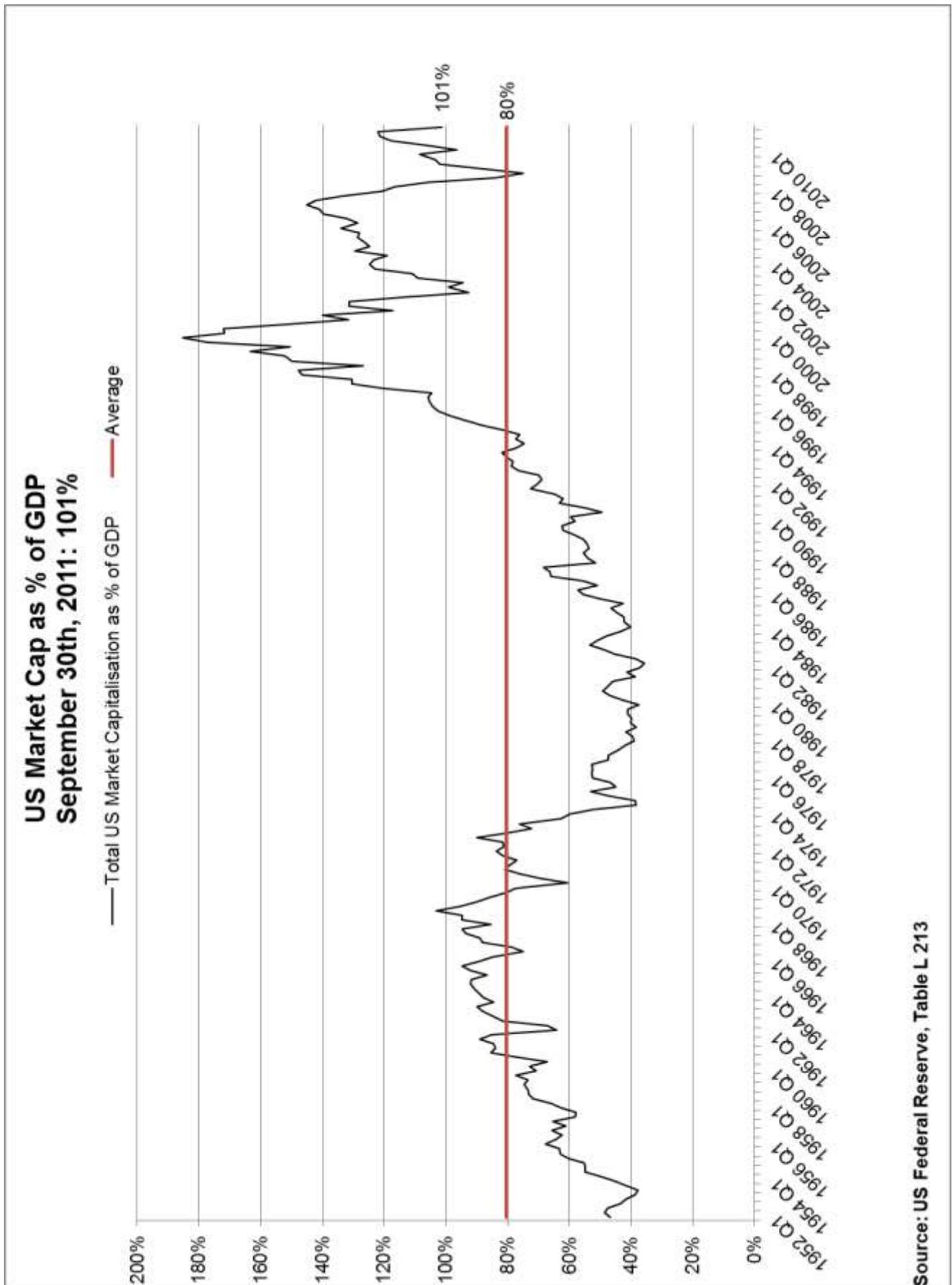
Source: Robert Shiller

Appendix 4.2 – Tobin's Q



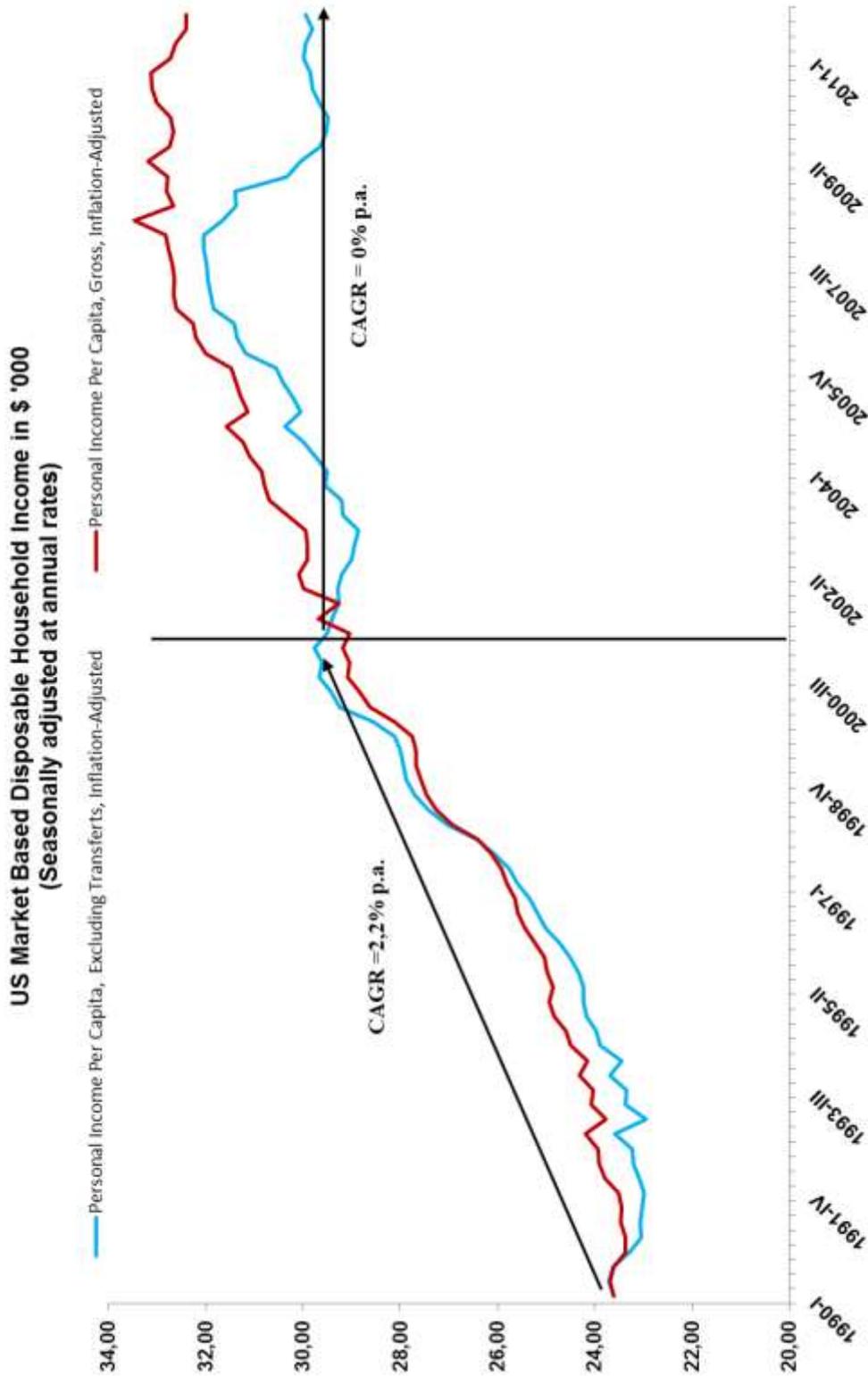
Source: US Federal Reserve, Table B 102, R 102 Line 20

Appendix 4.3 – Capitalization of US companies as % of GDP



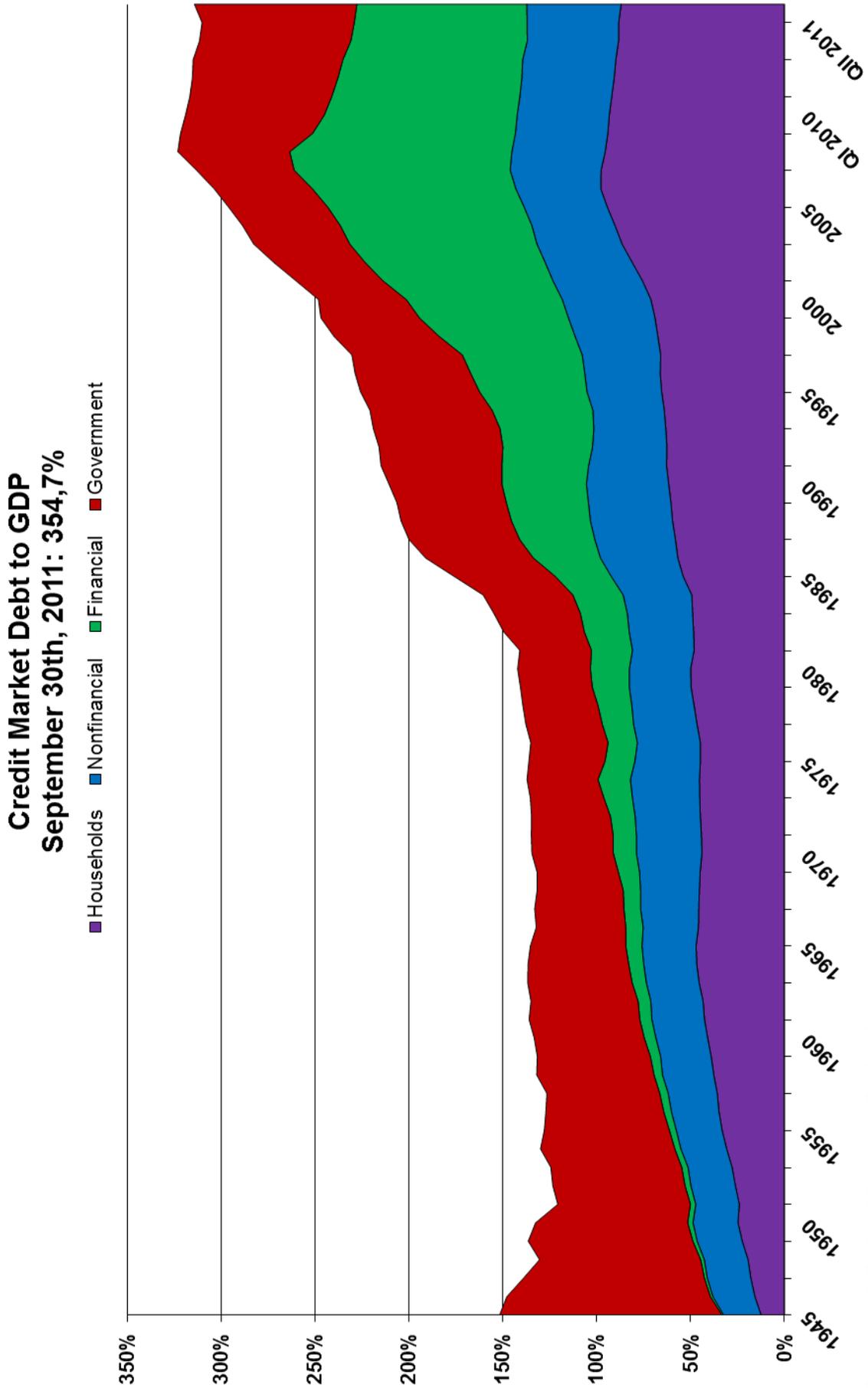
Source: US Federal Reserve, Table L 213

Appendix 5.1- US Market Based Disposable Household Income



Source: BEA, Table 2.1. Personal Income and Its Disposition

Appendix 5.3.a- US Debt by Sector as % of GDP



Source: US Federal Reserve, Table L1

Appendix 5.3.b - Debt Ratio of US Households in Percentage of Disposable Income

