FORUM

European Smallcaps GmbH

Memorandum

To : FORUM Staff

From : BW

Copy to :

Date : February 8th, 2010

Subject : Macro Dashboard Q 4 2009

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1. Summary of Results

Since our last Macro Dashboard the economy has shown signs of a strong comeback – and equity prices have recovered even more. **Put simply, equity markets are now pricing in a high probability of a V-shaped and sustainable recovery.**

Our frameworks for assessing the long-term perspective on the level of corporate profitability – mainly the concept of Reversion to the Mean - signal a different perspective. We expect profits to stop their way up at some point in the future and to drop back to their traditional averages. Similarly we see markets as slightly overvalued – slightly more than at the time of the last Macro Dashboard.

As a result we expect moderate returns of 0 – 3% p.a. over the next 7 – 10years. In the last Dashboard we were slightly more conservative.

Secondly, we see **more risks for negative scenarios for the economy and equity markets, driven mainly by the high level of indebtedness in various sectors of many mature economies**. This affects mainly the US consumer, but increasingly so governments. We view a process of extended deleveraging as necessary to correct for the strong build-up of debt on the way to the crisis and as a result of the crisis.

As a result we have the **following recommendations:**

- Implement the build-up of the standard share of 20% cash; fight loss-taking aversion and tactical optimizations to achieve this goal;

- **add a position of 5 – 10% of assets in short positions to reduce equity long exposure.**

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

2. Purpose of this Paper and Conceptual Basis

2.1 Purpose

We are value investors who spend most of their time looking for undervalued businesses by applying a bottoms-up approach company-by-company. We work like **"truffles pigs"** with our heads to the ground most of the time. **The purpose of this paper is to "invert" this perspective by taking a tops-down view on the economy, on financial markets and on the discussion of risks.** Specifically, it intends

a) to determine the "**Average Future Conditions**" **in the economy** to calibrate our expectations for the future profitability in the economy and in our portfolio companies;

b) to **raise our awareness to "mental biases"** from working only at the "tree level of the economy", e.g. Extrapolation Bias, Illusion of Control Bias or "Frog in hot Water Bias". By raising our awareness of such biases we can eliminate them more easily;

c) to recognize significant over- or undervaluation in capital markets to **position our asset allocation for a Reversion to the Mean. This aspect also includes recommendations on strategies for hedging risks.**

2.2 Conceptual Basis

The conceptual basis of most of the analysis performed in this paper is the recognition that **both the economy and capital markets are dynamic chaotic systems:**

a) dynamic, because the weight of a variables changes constantly
b) chaotic, because small changes in one variable can cause disproportionate variations in the outcome variables**.**

We associate ourselves with the mathematicians who claim that it is **impossible to predict the future status of such systems. (Other "investors" claim the trend is another patterns which money can be made from – we do not understand this pocket of "investing".)**

The only framework we have seen working in such systems is the Reversion to the Mean ("RTM"). In basing investment decisions on the RTM concept one has to keep in mind that

a) the RTM process **only follows weak patterns or no patterns at all**
b) the reversion happens in **undefined cycle times.**

In our analysis of these developments we review very long time series – extended to many decades and back to 1881 in one case. We concentrate on analyzing the status of a parameter relative to its long-term mean. **Thus the conceptual basis of our investing is "long-term/short-term arbitrage" based on RTM.**

Some readers have challenged the use of averages based on very long time series. They imply that the (business) world has become as better (business) world in the last few decades and both

profitability and valuation should therefore be structurally higher today than in the past. **We think that this is a variation to the "This time it should be different"** theme which has cost investors dearly in a string of bubbles (e.g. Japan in the eighties, the technology bubble in 2000 and – last but not least – the banking bubble which just burst a few months ago). **We run when we sense a "this time it is different" argument, be it implicitly or explicitly.**

2.3 Limitations of the Approach

Given the nature of the economy and capital markets as dynamic chaotic systems we think that the **probability of a Reversion to the Mean increases geometrically with the degree of deviation: we are really looking for dislocations in the market that exceed one standard deviation in statistical terms.** Such events occurred e.g. in 1974, 2001, or 2008. Smaller deviations should be ignored as "noise".

This is illustrated in **Appendix 2.3** which evaluates the relationship between the degree of overvaluation of Shiller´s CAPE with investment returns in the periods following such overvaluations. The numbers suggest **that 5- and 10-year real returns are close to 0 once the overvaluation exceeds 1 standard deviation.**

This relationship **defines the limitations of this approach**: most of the time the macro variables will be oscillating within a band of less than 1 standard deviation around their mean – and in these cases we will abstain from any conclusions.

The second limitation of this approach is that the lack of pattern in the RTM process does not allow us to make any short-term predictions about the economy and capital markets. Thus we have to **restrict ourselves to expectations about very long-term developments and – most importantly – on expected risks and returns.**

3. Status of the Economy in the Cycle

3.1 Corporate Profits as % of GDP (Appendix 3.1)

In Q III 2009 **US after-tax Corporate Profits** continued on the upward trend started in Q II 2009 and **increased to 6,0% of GDP, up from (a revised number of) 5,1% in Q II 2009**. The recovery in Q III 2009 **brings it up to 120% of its 80-year average.**

US after-tax Non-Financial Corporate Profits – eliminating the volatility of banking profits – increased as well in Q III 2009, in this case to 4,1% of GDP**,** up from 3,8% in Q II 2009. The eighty-year mean is 4,0%. Thus US after-tax Non-Financial Corporate Profits in Q III 2009 **managed to increase above the long-term average, ending up at 103%.**

Most of the growth in profits has come from reductions in labor costs – while top-line growth in Q III 2009 was anemic. This bodes poorly for the outlook for demand from the consumers in the periods to come.

These data **appear surprising to us given the general perception that in 2009 we were in the midst of the deepest recession since 1929**. The reality is:

a) **Q I 2009** has been the only quarter in the current recession in which US after-tax Corporate Profits fell below their long-term average of 5,0%.

a) in **Q II 2009** they recovered to about "normal" with the non-financial sector still slightly below its long-term average and the financial sector above.

b) in **Q III 2009** both sectors exceeded their long-term averages with the financial sector apparently going back into party time.

c) Based on the preliminary GDP data for **Q IV 2009** and the first companies reporting on the quarter **one can expect corporate profits to continue their increase above their historical average.**

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 interest or taxes.

As you can see from the **Appendix 3.2** we get to the same results:

a) **An ongoing recovery in Q III over Q** II to 31,8% from 31,2% (revised);

b) ….**significantly above the 80-year average of 27,0% - to be precise, at 118%.** As you can see from the long-term chart **a level above 31% was only reached twice:**

- In 1929 – with the Great Depression following
- In 1942 in the process of ramp-up to WWII – followed by a steep decline to 1946.

This is in line with the observations made in chapter 3.1. – and not very comforting.

3.3 Corporate Profitability Measured as ROA (Appendix 3.3)

In Q III 2009 the Pre-Tax Return on Tangible Assets ("ROTCE") of the US Non-Farm, Non-financial sector (as reported by the Federal Reserve) **increased to 6,3% from (a revised number of) 5,9% in Q II 2009.**

The **long-term average since the first publication of this time series in 1965 is 5,7%**. Thus as in the case of profits as a share of GDP this measurement of corporate profitability has continued its way to a level above long-term average: **the ratio reported for Q III 2009 implies a level of 110% of this average.**

Thus we have the same pattern as with the other two levels of profitability discussed above: **in this "so-called recession of 2009" ROA only dropped below its average during a single quarter and recovered to levels above its historical averages shortly thereafter**.

3.4 FORUM Conclusions on Expected Future Profitability

When viewed together, the four metrics for **corporate profitability in Q III 2009 show a consistent pattern when compared with historical averages:**

Metric	% of LT Average	Standard Deviations
Profitability as % of GDP	120%	0,57x SD
Non-Fin. Profits % of GDP	103%	0,03x SD
Corporate EBITDA Level	118%	2,07x SD
Non-Financial ROA	110%	0,41x SD

In our last Macro Dashboard we stated that "**there is no conceptual underpinning for forecasting that corporate profits have reached the bottom of a V, U or any other letter suggesting a sharp upswing to an undefined new level**."

This was – and still is – the most likely outcome for the mid- and long-term. In the short-term the enormous efforts by central banks and governments to stimulate the economy does in fact appear to distort the natural process of mean-reversion and to create something like the beginnings of a V-shaped recovery.

But as we will discuss below we think that this is an unsustainable trend **as it would imply a higher level of corporate profitability than observed in the past as the "new normal".** As pointed out above we refuse to believe in any new paradigms relating to corporate profitability. **We believe this short-term recovery is unsustainable in the longer-term and see an opportunity for long-term/short-term arbitrage (vulgo: reduce long equity exposure).**

3.4.1 Implications for our Average Future Conditions Assumption

One of the three purposes of this analysis is to **define the Average Future Conditions ("AFC") which are central to our valuation.**

To protect ourselves against getting carried away with the optimistic biases of any projections into the future **we use the track record of a company for the last 6 – 10years and assume that the levels of profitability and cash generation in the next 6 – 10 years will be close to the past.** With other words we assume that AFCs will be more or less a repetition of the past – apparently a crude assumption, but in any case better than falling victim to the follies of forecasting.

Based on the analysis of corporate profitability above we believe this approach will generate reasonable results. In the section on risk below we will even **argue that the risk on AFCs is more on the downside than on the upside.**

3.4.2 Awareness to Biases

The **biggest biases** we see misleading investors at this point in time are:

a) **Recency Bias** because investor mood seems to be **anchored in the level of profitability achieved in the goldilock years of 2006 – 2008** when everybody was making good money. Our mental anchor resides in the longer-term averages which suggest that these years were a clear exemption – driven mainly by non-sustainable expansion of credit in many sectors of the economy - not a normal state to which affairs should return.

b) **Extrapolation Bias** because it is tempting to draw a line through the two quarters of recovery as the momentum appears to be carrying on at least until now. Again, our mental anchor from long time series suggest no basis for an extended recovery.

Based on the analysis outlined above we should be **careful not to get infected from the enthusiasm of the sell-side which extrapolates the current recovery into a full-shaped V.**

We have the feeling that Mr. Market has fallen victim to these biases in a strong way. Given the risks in the economy as well as still in the financial system **we see room for significant disappointment.**

3.4.3 Implications for Positioning ourselves Financially

In the last Macro Dashboard we stated:

"In terms of managing our net exposure to market risk beyond that the data on profit levels presented above are not strong enough to bet money on a contrarian – i.e. short – positioning."

We have nothing to add to this.

4. Valuations

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

For a benchmarking of **valuations based on earnings against historical context** 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 **C**yclically-**A**djusted **P**rice **E**arnings Multiple **("Shiller´s CAPE" or just "CAPE")**

Prof. Shiller reports **a CAPE of 19,6x for February 5th, 2010**, his latest update. On that date the S&P 500 stood at 1.066. This is up from a CAPE of 18,8x for September 30th (S&P 500 at 1.057)**.**

The **LT average of CAPE since 1881 stands at 16,3x.** This implies that current valuation has run up from its average again, to be precise it **stands at 120% of the long-term average.**

In terms of dynamics it is interesting to note that the earnings data entering the 10-year average will be significantly below the earnings data 9 – 10 years ago. Thus due to this roll-over effect CAPE will increase in the next few months even with an unchanged S&P.

As was the case with profits we can state that in this "perceived recession" **Shiller´s CAPE went below its long-term average for only 6 months (November 2008 to May 2009) – after having stayed above it in the 17-year period since January 1991.**

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.

Based on the **US Federal Reserve Flow of Funds** updated as of December 10th 2009 **the non-adjusted ratio has increased to 0,91 at the end of Q III 2009** from 0,78 at the end of June, 2009. The non-adjusted average observed since 1900 is 0,63, **thus q as reported by the Fed is at 144% of its long-term average.** After adjusting for the increase in the S&P 500 since September 30th, 2009 to 1.110 as of December 31st, 2009 from 1.055 as of September 30th, 2009, i.e. by 5% **the overvaluation of q including statistical discontinuities as of December 31st, 2009 increases to 151% of its long-term average.**

Smithers & Co. adjust Tobin´s q as reported by the Fed for statistical discontinuities beginning in 2983, mainly revaluations of fixed assets to market values beginning in 1984. At the end of Q III 2009 **q ex statistical discontinuities (line 20 of Table R 102)** stood at 1,41 (1,23). Based on the long-term average of 0,85 this implies **a level of 166% of its long-term average**. After

adjusting for the increase in the S&P 500 by 5% as outlined above **the overvaluation of q ex statistical discontinuities as of December 31st, 2009 increases to 174% of its long-term average of 0,85.**

This suggests a significant overvaluation.

4.3 Historical Price-to-Book Ratio (Appendix 4.3)

4.4 Incentive Systems

In the past two quarters he have cited additional qualitative indicators which make our "psychosomatic markers" – vulgo belly – revolt **as they remind us vividly of experiences in previous bubbles**. The examples have changed, but the impression remains the same:

a) **Sell-side Optimism**: as of February 2nd, 2010 consensus forecasts assumed a growth in MSCI Germany eps by 70% in 2010 and another 24,5%in 2011 yielding a total increase by 110%;

b) Lack of Fear in the Market: In this case we resort to the VIXX as another quantitative indicator for fear. As **Appendix 4.4** shows the level of fear has come down once more. As of December 31st, 2009 it stood at 21,7, down from the 25,6 observed on September 30th, 2009. In January 2010 it reached a low of 16,8 – which implies a high degree of fearlessness even by historical standards.

4.5 Correlation of Valuations

In the last quarterly Macro Dashboard we mentioned that correlations between asset classes were very high by historical standards. We interpreted this observation as an expression that easy money was chasing any asset class which had not participated in the run-up since March 2009, creating momentum plays.

This is largely unchanged.

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 30th, 2009:

	% of LT Average	Standard Deviation
Shiller´s CAPE	120%	0,57x SD
Tobin´s q non-adjusted	151%	0,51x SD
Tobins´s q adjusted for discontinuities	174%	1,36x SD

These data suggest that **we are getting again into an overvalued market by historical standards.** Below we will address some questions as to the implications for us.

4.6.1 Is there a new Bubble (Emerging)?

The valuations achieved again after the recovery in equity markets raises the question whether we are entering – or already in – a new bubble. To answer this question we resort to the framework provided by business economist Hyman Minsky and historian Charles Kindleberger in his book: "Manias, Panics and Crashes". The Economist ran the same test in his January 9th, 2010 edition and came to the following conclusions which we largely tend to agree with:

a) Mature Economies: The **displacement** – a new development (like the railways or the internet) which supplies the source for a narrative which in turn is **the basis for a new version of the paradigm that "things are different this time"** is not easy to detect. We have the feeling that most of the run-up in prices was driven by institutional trading which in turn was based on the opportunities offered by various carry-trades. We do not detect a new "hype" – picked up and magnified by media in the mature economies.

   The second phase is **"Growth of Credit".** Again, the data on money growth along the various definitions in most countries suggests even a contraction of credit.

   As we see little evidence for the first two phases of a bubble we would conclude that at least in the mature economies there is little evidence of this. We are aware that historically obvious signs of bubbles forming have been overlooked by analysts who were blindsided by biases like myopia or illusion of control. **Nevertheless after several attempts to identify signals fitting the patterns outlined by Minsky and Kindleberger we do not see evidence of a traditional bubble.**

b) **Emerging Markets**: There may be a bubble in Chinese Real Estate emerging. Based on anecdotal evidence there may well be **displacement** at work in that a large number of Chinese consumers/investors view real estate as an asset class which can only go up. On the other hand the Central Bank appears to have reigned in the **credit growth** beginning in January 2010 thus putting a cap on the ongoing speculation. Thus we do not see the requirements for phase 2 fulfilled.

c) **Gold:** One could have seen some **displacement** at work ca. 3 months ago, mainly defining this commodity as a "must have in these times" asset class – ignoring fundamentals of supply and demand. But then again we do not see signs of the **credit creation** which was a key part of traditional bubbles.

Based on this cursory analysis we would argue that we do not see signs of a traditional asset bubble at this point in time in most markets. We would therefore not see the need to increase the need for an increased downside protection as there is massive irrationality around us. **There is just clear overvaluation.**

4.6.2 Implications for Expected Long-Term Returns

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 slightly below long-term averages**. The long-term **real return** of the US equity market since 1900 has been 6,3%. The most likely expected return will depend on the time it takes for this overvaluation of ca. 30 - 40% taken by averaging the CAPE and q data to unwind:

Years for Unwinding	**Real Return p.a.**
2	negative
5	0 – 2%
10	**1 – 3%.**

Our statistical exercise – **correlating standard deviation** of Shillers CAPE with subsequent nominal returns – as presented in Appendix 2.3 would suggest real returns of ca**. 3-4% p.a.** in the next 5 and 10 years.

GMO –which follow a very similar investment philosophy based on Reversion to the Mean – in their newsletter January 2010 made the following forecasts on expected total return for US equities **based on a 7-year time horizon:**

a) large caps	1,3%
b) small caps	0,5%.

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.**

4.6.3 Implications for FORUM Asset Positioning

By historical standards the degree of overvaluation in equity markets is still moderate. Of the three valuation metrics analyzed above the highest standard deviation is 0,57x in the case of the adjusted Shiller's CAPE. **At that moderate level of "stress" we are not prepared to take a significant short position to protect ourselves against a strong negative development of markets.**

Based on the analysis performed so far we would limit our "hedge" to a negative market development to

a) **sticking with our 20% standard cash allocation**

b) **Adding a short position amounting to 5 – 10% of our assets. This is a new development since our last quarterly Macro Dashboard.**

5. Risks

5.1 Debt and the Need for Deleveraging

In the last Macro Dashboard we had identified the following two points as **the major risks to our portfolio from a top-down perspective:**

a) **US consumption not getting back to a self-containing recovery.** This is a modification of the risk of total Credit Market as % of GDP which we had discussed in the last two editions of the newsletter.

b) **Sovereign Debt as a % of GDP getting out of Control**.

We still see them as highly relevant and significant. Since then two publications have tackled these topics from different perspectives:

a) **Carmen Reinhart and Kenneth Rogoff in their book "This time is Different"**. It offers an intriguing set of historical data on the frequency of sovereign defaults. It is fascinating to learn how frequently sovereign defaults occurred, even in the economics of what are now the G-7;

b) The **McKinsey Research Institute** with an analysis of the process of build-up of bubbles and the process of deleveraging. Their research is based on 45 episodes of deleveraging since the beginnings of the 20th century. **32 of these episode occurred after financial crises.**

In the following two chapters we have tried to blend the results of the vast amount of evidence from the past into our thinking as to where we stand today.

We have added a new risk: the incentive structures in the financial sector which lead to the present crisis have not been changed in a way which we deem effective (see chapter 5.3). Thus we see a clear risk that the willingness to produce (subprime mortgages) or take on (increase leverage) risk by players in the financial sector may repeat itself.

5.1.1 General Conclusions from evaluating Past Patterns of Deleveraging

The **mainstream conclusions** of both publications are:

a) The processes of running up debt in an unsustainable way and the corrective process of deleveraging appear to be **surprisingly frequent**. Human nature appears to be structured in a way which generates cycles of boom and bust.

b) When financial crises have preceded the non-sustainable build up of debt the correction process is longer and more severe than in periods of deleveraging which were not preceded by such crises. Specifically

- it takes **many years for GDP to get back to pre-crisis levels**: Reinhart/Rogoff cite 4,4 years for post WW II-crises and 10 years for deep earlier crises (Figure 14,8).

- The McKinsey institute concludes that in the most common pattern for deleveraging – they call it "belt-tightening" **GDP growth slows to 2/3 of the growth observed in the 10 years before the beginning of the deleveraging process.**

  - **unemployment** rises significantly by 7 percentage points and remains elevated for 5 years.

- The authors of the McKinsey study point out that **the process of deleveraging may take longer and/or may be more difficult than past episodes** as in the current crisis many governments and money sectors are affected. E.g., in past crises export-led growth helped in the deleveraging process. Today this may be more difficult to achieve as the countries with the largest world markets are undergoing a contracting process.

Our conclusion is that we should retain our skeptical view towards the economic developments in the coming 3 – 5 years. **If the past is a guide for the future the "New Normal" as termed by Bill Gross may be more difficult than many of us can imagine today**: it may be littered with sudden developments of sovereign default, weak and unsteady consumption or strong changes in currencies.

Or as the Financial Times Germany commented in an article on equity market valuation dated February 2nd, 2010:

*"Until several years ago we could be rather sure that with a time perspective of 12 months one of two possible scenarios would materialize: either the global economy would run smoothly – normal growth with reasonable inflation -, or there would be a recession which would be overcome within few quarters. ……**This is not the case anymore as nobody knows where the imbalances in the world economy will lead the world economy, not even to mention in five years."***

The opinion of these authors and ours suggest that the next years carry more risk than the past 5 years. As a result risk premiums should go up **and with risk-adjusted pricing this implies lower equity prices. We as Value Investors should required a higher Margin of Safety to compensate for the risk from the imbalances in the global economy, in particular the need for deleveraging.**

5.1.2 Update on the Process of Deleveraging

Appendix 5.2.a gives an update on the process of deleveraging in the USA by showing the evolution of **Credit Market Debt per sector as % of GDP. Highlights of the recent process of deleveraging in the first three quarters of 2009 are as follows:**

a) The **financial sector** has progressed the most with the deleveraging: its debt as a % of GDP has decreased to 112,8 % as of September 30th, 2010 vs. 118,3% at the beginning of

the year 2009. This is confirmed by the work of the McKinsey Institute which covers the period until June 30th, 2009 (Exhibit 22).

b) The **corporate sector** is also doing ok, leverage in the US had not increased in this sector as much compared with the leverage observed in the last 15 years.

c) The **household sector**, which had built up debt the most going into the crisis has continued its gradual process of deleveraging: debt decreased to 95,7% of GDP at the end of Q III 2009 from 96,6 % at the end of June 30th, 2009.

d) The negative piece of news comes from the **government** which increased its debt at the rate of ca. 10% of GDP p.a.

As a result of these movements overall credit market financial debt as % of GDP only dropped to 369,4% from 372,4% of GDP. **Put simply, the government has substituted the debt which was paid back by the private household sector. This does not solve the issue of non-sustainable debt in the US economy.**

5.1.3 Outlook for the Process of Deleveraging

Since the publication of the last Macro Dashboard we have received signals that politicians around the globe do not have the willingness to reduce the degree of debt

a) President **Obama of the USA** has declared that he intends to live with a federal budget deficit amounting to 10,6% of GDP in the current household year, followed by a deficit of close to 10% in the following year. I do not see any commitment to cut back on the growth in federal government debt outstanding.

   Meanwhile there is a significant build-up of debt and payment obligations in state and local debt and in federal agencies. The obligations and risks associated with these deficits have not reached a high level of awareness.

b) The new **Japanese** government is content with a budget in which taxes finance less than 50% of total expenses.

c) In **Germany** politicians make no efforts whatsoever to reign in the deficit which has built up during the last two years.

We take a very crude judgment here, based largely on feelings and common sense. But we are afraid that these developments are time bombs which may lead to unpredictable distortions in financial markets in the next 3 – 5 years as their non-sustainability receives increased awareness and attention.

5.2 A New Risk Factor on the Radar: Incentive Systems for the Financial Sector

In an analysis of systemic risks to the financial systems and the real economy one has to give significant weight to the role of incentive systems. We believe it is the increasing prevalence of compensation structures in many sectors of the US financial systems which had fostered the risk-taking culture of the past. **We would characterize it shortly by "heads I win – tails you lose. Agents in many financial entities have managed to secure a cut of any profits made in good times – while the downside is either picked up by the investors or the investors plus the tax-payers via the government.**

It is shocking to us how managers in financial institutions which were bailed out by the government received multi-million $ bonuses. It is also perplexing to us how the large prime brokers were able to transform many of their activities into structures which allowed for 2 + 20 schemes – which transfer an even higher share of short-term profits created to managers.

We believe any effective reform of this **must address the behavioral aspects of decision-making by linking risk taken on for third-party funds** – this includes borrowed funds as well – **with personal downside risk**. In essence this requires that any bonus payments based on profits earned must be paid out contingent on no risk materializing in the future. The simplest way of achieving this alignment of downside risk would be to make any bonus payments contingent for a period of up to 10 years: if the entity runs into financial trouble in the next 10 years the payment will be demanded back. **In effect this introduced the personal liability of the partner structures of the past.**

In an interview Warren Buffett highlighted the need to link personal risk with risk taken on for an institution by – jokingly – proposing that any Board Member of an institution going insolvent being shot in public. He went on to say that with such a personal downside risk there would never have been any excessive risk-taking…….

Instead, governments have opted for a cap on bonus payments and minimum equity ratios. These more formalistic systems do not change anything in the underlying behavior of the participants – as evidenced by the immediate attempt of market participants to circumvent such systems.

With largely the same asymmetric incentive systems still in place we expect decision-makers in the global financial system to respond to them and a return to these excesses.

6. Summary and Conclusions: Combining the RTM and Risk Perspective

6.1 Expected Economic Conditions and Equity Returns

The RTM perspective has shown that the **economies have recovered surprisingly well**. Levels of economic profitability have already exceeded their historical averages.

Valuations have surpassed even this rapid speed of recovery after delivering outstanding returns in 2009.

The risk perspective highlights the problem, that the drivers of the present recovery are non-sustainable: it is the build-up of government debt substituting for the past build-up of private debt. Past crises confirm that such a massive build-up of government debt is the standard:

according to Reinhart/Rogoff the level of government debt increases by 86% following financial crises.

But **business history** also suggests that the **recovery after a financial crisis has lasted between 4 and 10 years, depending on the severity of the preceding financial crisis**. The recovery out of the present crisis may even be more painful as – unlike the other episodes of deleveraging after a financial crisis – the present situation is rather unique in that it affects countries with a combined share of more than 40% of global GDP.

Combining the RTM and our risk perspective we draw the following conclusions:

a) We should assume that **Average Future Conditions** of the economy will be at best as good as during the last cycle which we date from 2002 – 2008. **There is significant risk that we err on the downside.**

b) **Overall equity returns in the next 5 – 10 years** in the mature economies should be assumed to be below their long-term averages, **i.e. ca. 0 - 3% p.a. in real terms rather than 6,3%.**

6.2 Range of Potential Outcomes

In assessing the Macro picture we see powerful forces at work which pull the economy and the financial markets into opposite directions:

- we have an economy which is suffering from the **correction of the largest debt cycle since** the beginning of the 20th century – but we also have the **largest stimulus programs** and the **lowest real interest rate** since many recessions;

- we have the **deepest systemic banking crisis since 1929** with the Federal Reserve Systems leading banks worldwide nationalized, but also **the most massive worldwide flooding the financial sector with liquidity**, yet **credit growth is contracting;**

- we have a stock market **which has not (yet) dropped close to the levels observed in past recessions** – and has moved into overvalued territory again.

Such a set of variables as drivers are set to **generate an unusually wide range of outcomes.**

As a side effect we are **expecting an above average volatility in markets.**

7. Recommendations

7.1 On Net Equity Exposure

7.1.1 Cash Quota and Shorting

After reviewing the new data and conclusions in this Macro Dashboard **we have become slightly more cautious than in the last Macro Dashboard**. We see a larger risk for negative scenarios for both the economy and equity valuations. As a consequence we should

- implement the sale of equities to reach a cash quota of 20% of assets

- in addition build up a short position of 5 – 10% of assets.

7.1.2 Other Asset Classes

Unchanged from the last edition: Build up the deal flow in Private Equity as there may be forced selling or forced capital increases in the small-cap and mid-cap PE sectors due to the credit squeeze.

7.2 On Hedging Risks Outside Equity markets

7.2.1 Equity Market Volatility

Conceptually we do not view volatility a risk for us as it affects only share prices, not Intrinsic Values of our investment. We have listed it here because we view it as an opportunity

In our last Macro Dashboard we proposed to **consider an investment in the VIXX at a level below 20**. Our reasoning behind this investment idea is as in the medium and long-term we expect regular bursts in volatility.

We did not act on this recommendation as we did not find a derivative that allows us to mimic the VIXX. **Any reader who has suggestions on this topic is cordially invited to contact us.**

7.2.2 Sovereign Debt/Deleveraging via Inflation

We have been discussing **how to protect ourselves against the build-up of sovereign debt which we believe is non-sustainable in the longer term**. A hedging strategy will be different depending on the mechanism which will lead to the deleveraging. **One of these is inflation.**

In our last Macro Dashboard we argued that real assets like wind energy production or infrastructure assets with a CPI indexation could be viewed as a better hedge than TIPS or gold. We had in fact invested in such assets – unfortunately they were located in Greece and share prices are down by ca. 1/3. We have not made up our mind yet whether we should view this as a buying opportunity to increase our allocation to such assets or whether we should stay away from the weakest of the European debtor nations as this exposes us to other risks.

We believe that the investment by Warren Buffett in BNSF railways is largely driven as a hedge against a strong inflation as railways have strong pricing power. Also, it may be a hedge against the risk of sovereign default in the US: for an investor with a very long-term perspective like

Buffett such a scenario is a realistic outcome within his investment period and this transfers his holdings of US bonds into an asset class which may be lower risk over the longer term.

It is interesting to remark that this switch from government bonds to equity in the leading US railway was viewed by Standard & Poors as a deterioration of asset quality with the result of a downgrade. We have a feeling that S&P is taking a traditional, non-reflected and short-term view on comparing the relative credit risk of these two asset classes.

7.2.3 Sovereign Debt/Deleveraging via Straight Default

We have been discussing internally **whether we should protect our holdings of Greek equities against sovereign default risk**. Before we came to a conclusion CDS prices shot up so massively that we abstained from such a hedge.

At present we are thinking about the **appropriate way of protecting the ca. 60% of our assets held in GBP equities against the risk of straight sovereign default**. We may come to the conclusion to hedge the currency as in such an event – or the perception that such an event has a higher probability than thought before – the currency may devalue strongly.

Table of Appendices

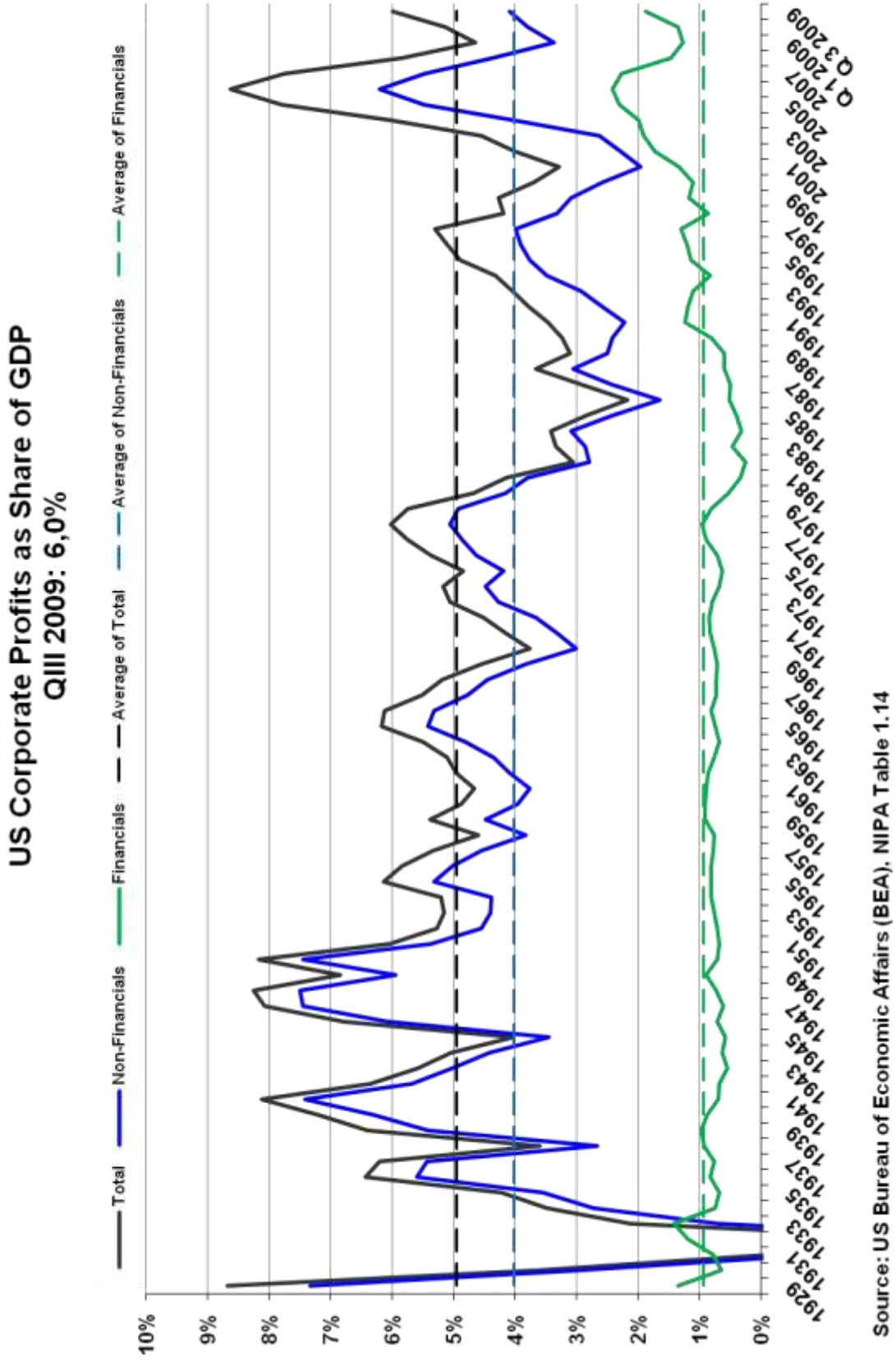
Numbering system relates to chapters in text

Appendix 2.3: Historical Relationship between Overvaluation and Returns for CAPE

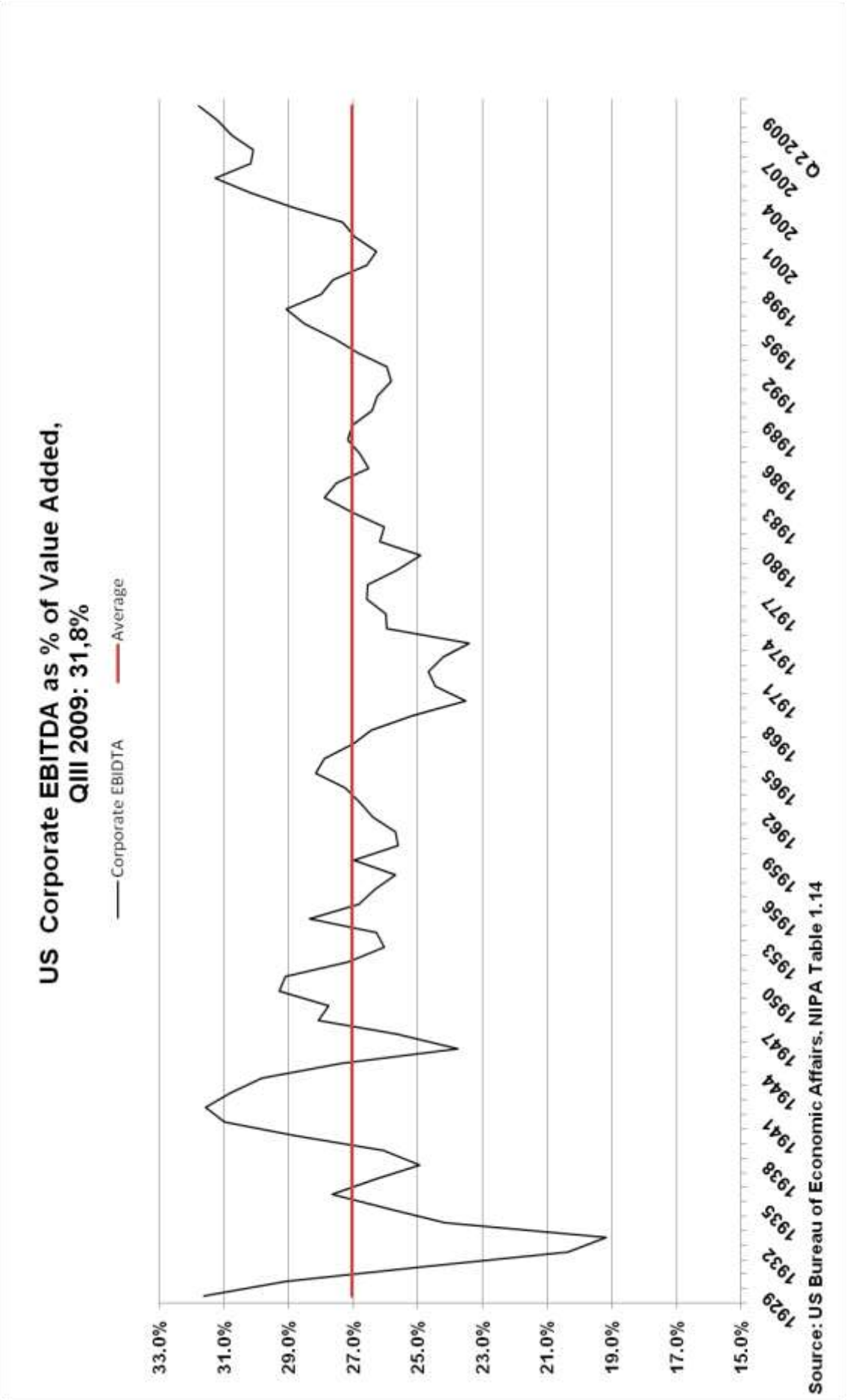
Relationship between Overvaluation and Returns for CAPE				
Overpricing as # of Deviations	**# of Months**	**Nominal Return**		
		2yrs	**5yrs**	**10yrs**
0.0-0.49	329	6.2%	3.2%	3.9%
0.5-0.99	187	6.9%	4.3%	2.6%
1.0-1.99	132	8.8%	1.3%	1.1%
2-2.99	27	8.7%	-1.7%	1.5%
>=3	32	2.9%	-3.1%	-1.9%
Total	707			

Period covered: 1881-2009
Source: Shiller, FORUM Research

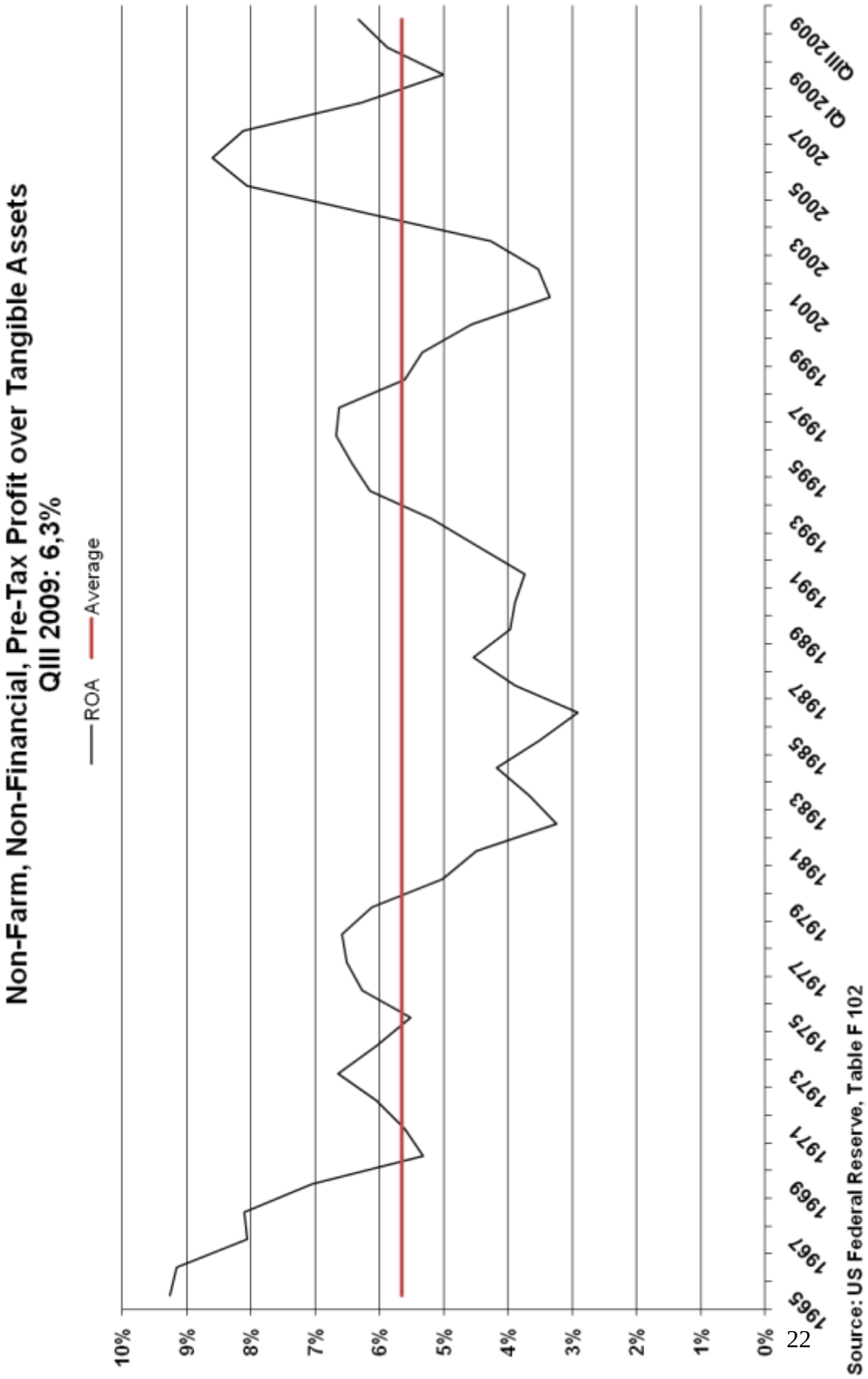
Appendix 3.1: Corporate Profits as % of GDP



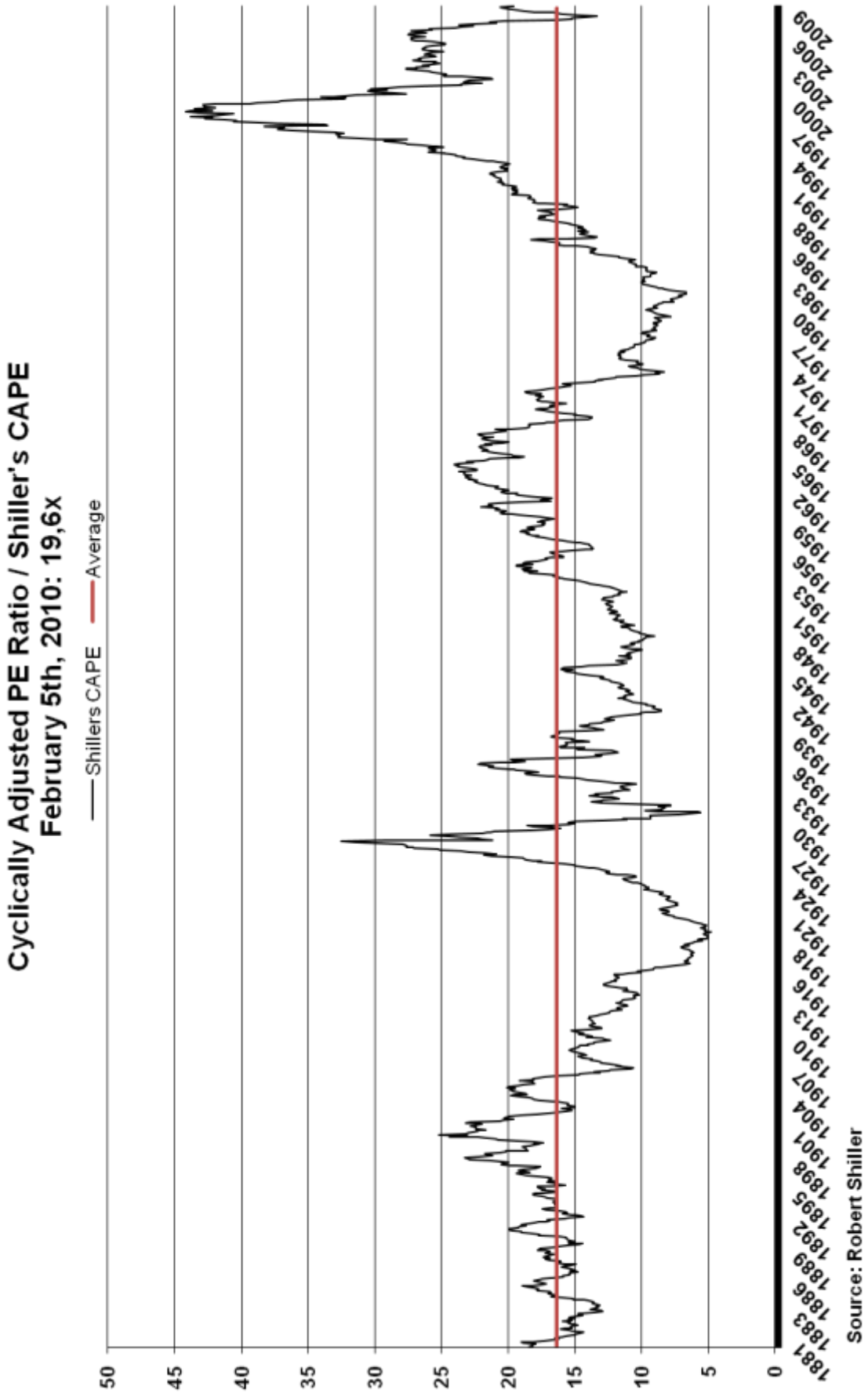
Appendix 3.2: Corporate EBIDTA



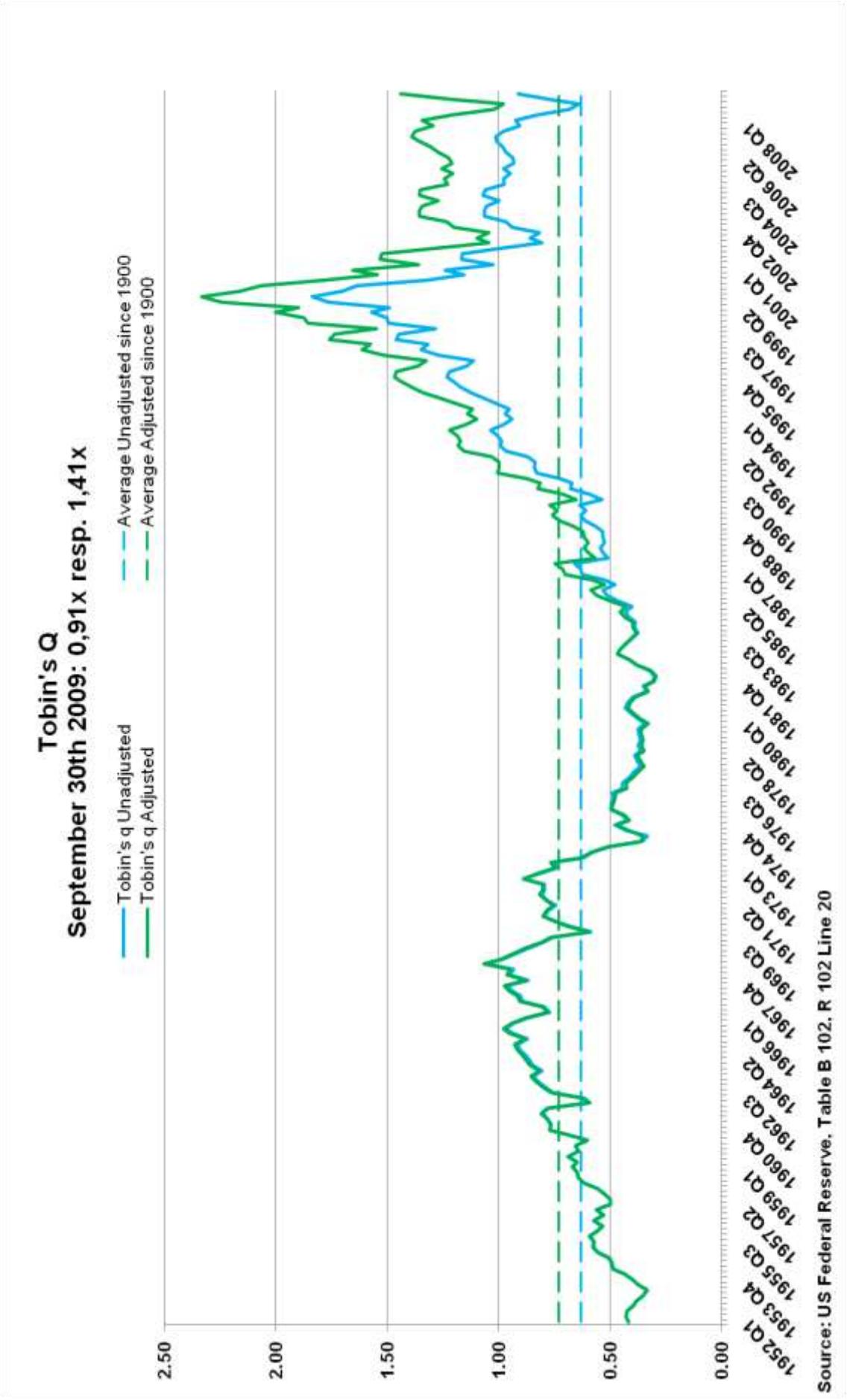
Appendix 3.3: Corporate Profitability Measured as ROA



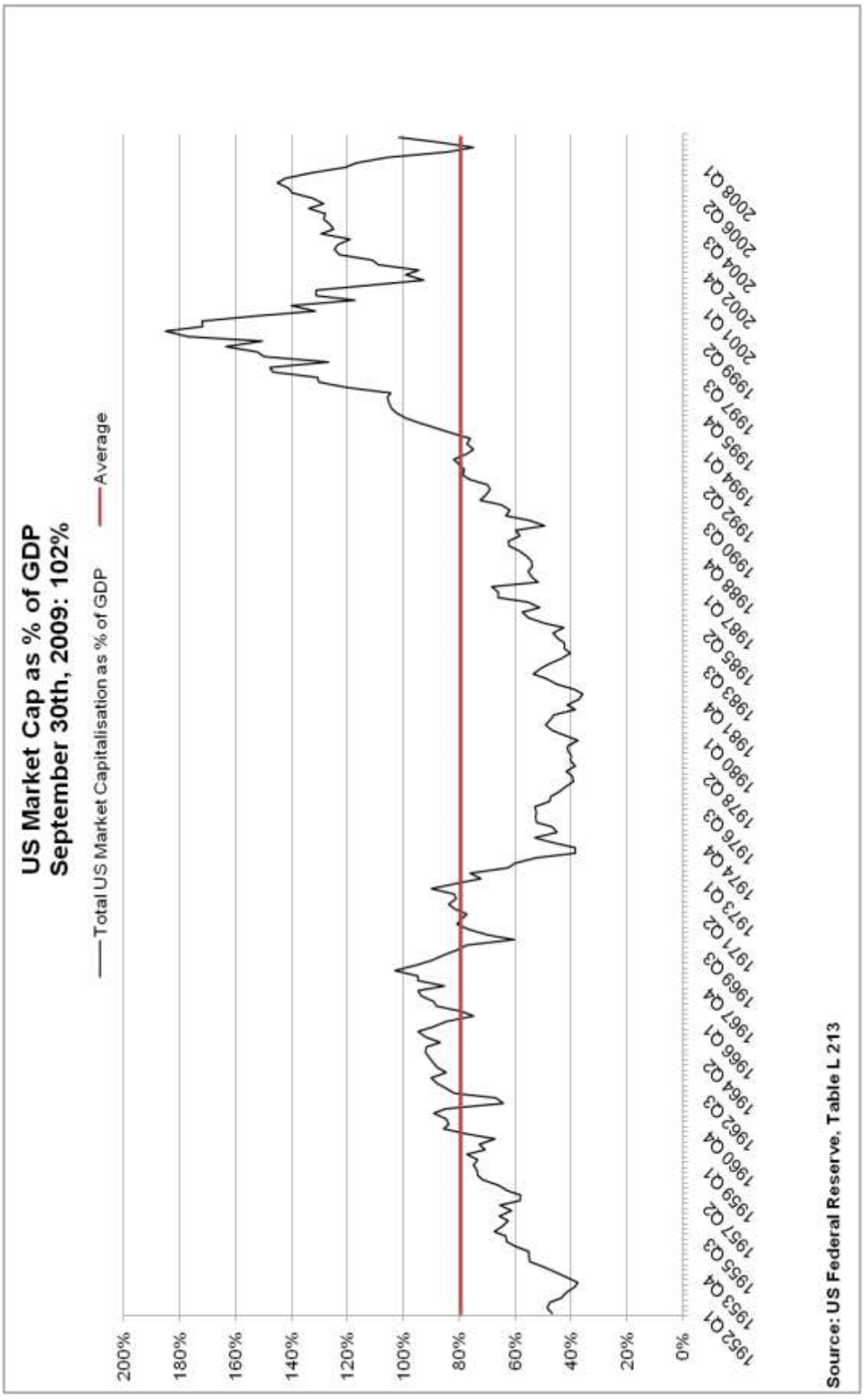
Appendix 4.1: Cyclically Adjusted PE Ratios/Shiller´s CAPE



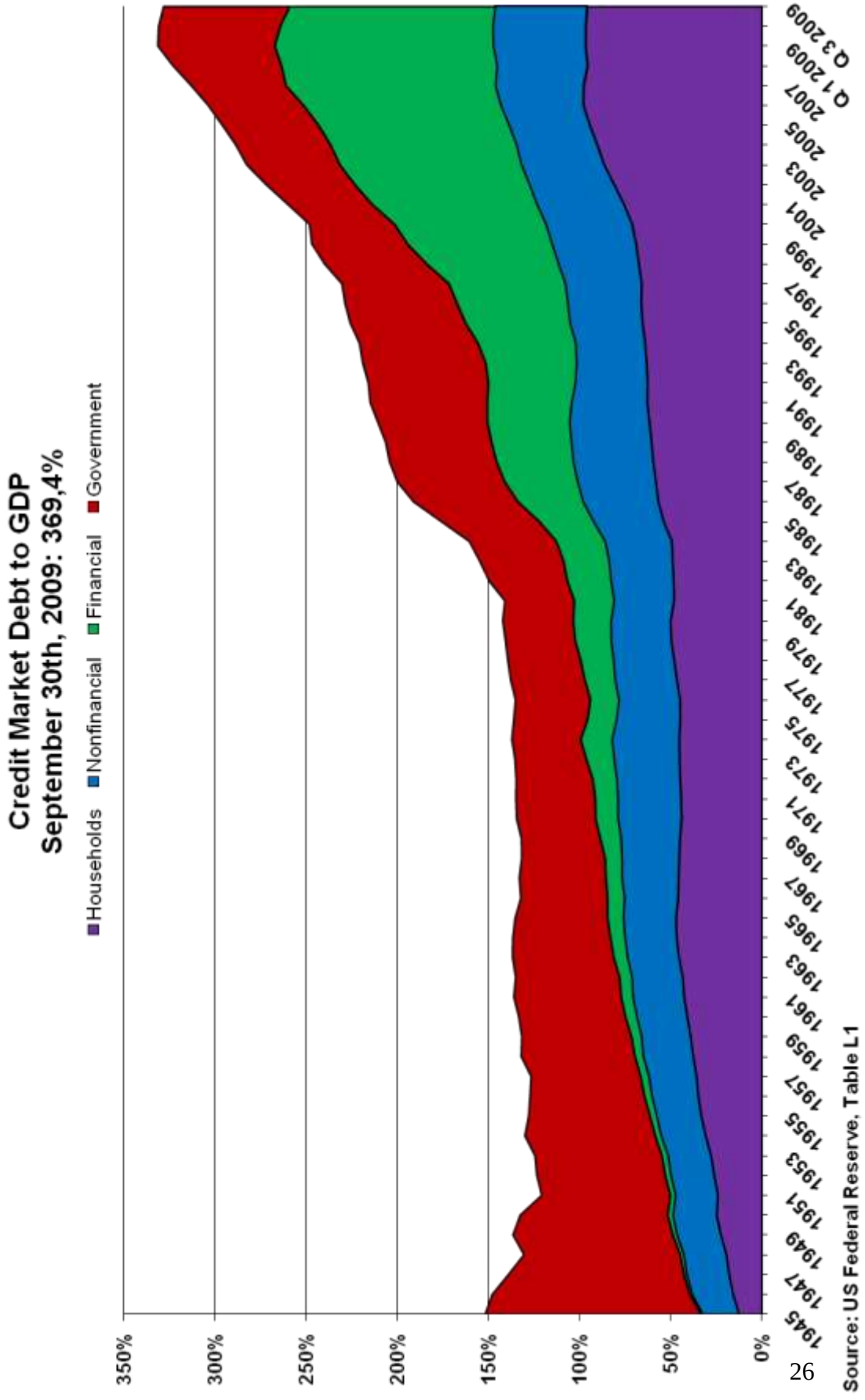
Appendix 4.2 – Tobin's Q



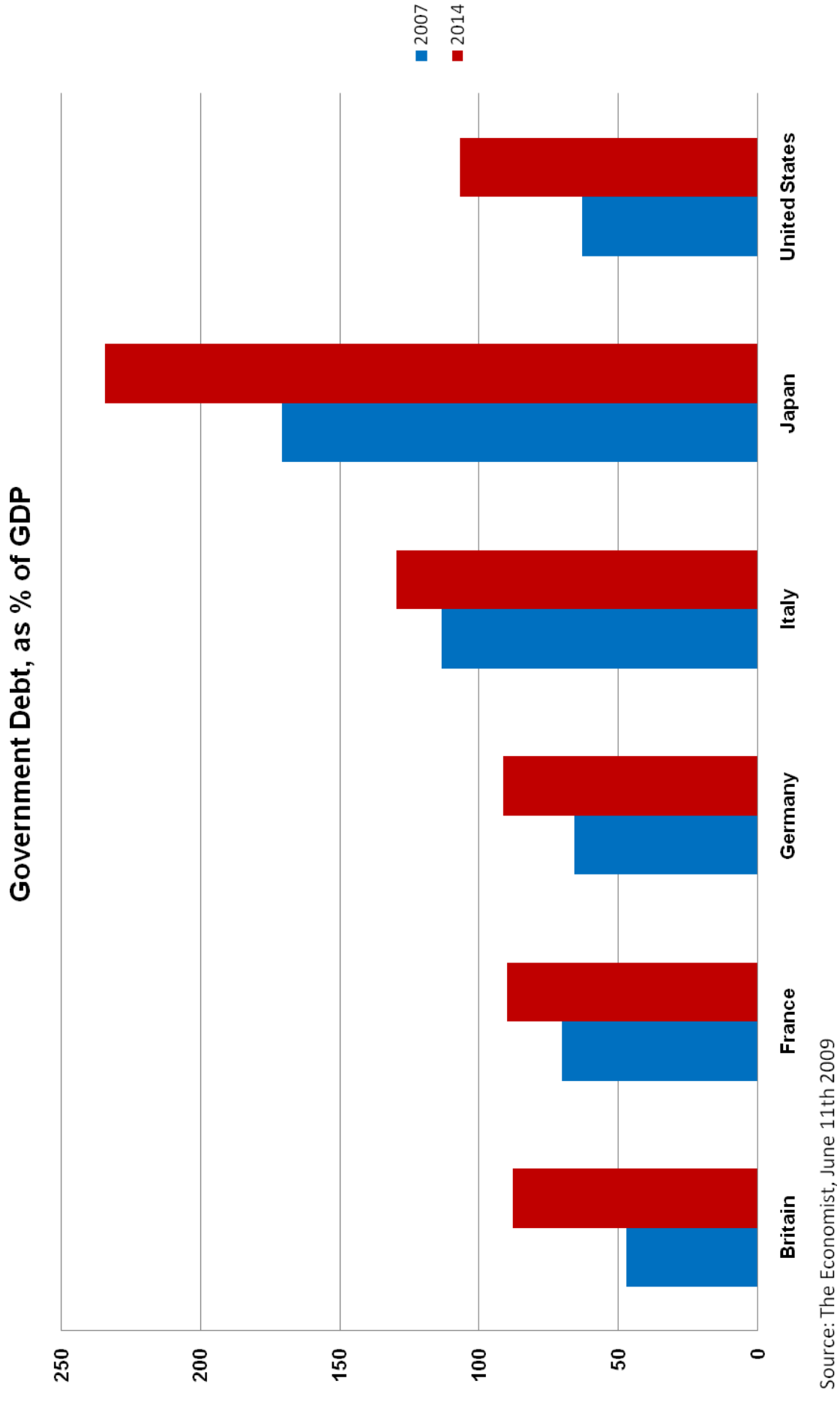
Appendix 4.3 – Capitalization of US companies as % of GDP



Appendix 5.1: US Debt as % of GDP



Appendix 5.2 Projected Evolution of Sovereign Debt



Source: The Economist, June 11th 2009