

# Memorandum

To : FORUM Staff  
From : BW  
Copy to :  
Date : April 10th, 2015  
Subject : Macro Dashboard Q I 2015\_V\_1.3

---

## 1. Summary of Results

### 1.1 Profits and Valuations

In Q IV 2014 the level of US Corporate profitability continued to stay significantly above its long-term average:

- a) at 25 – 50% above the historical mean with an interpolated **median at +38% above the mean**
- b) **slightly down** from the positive deviation at the end of Q III 2014 which amounted to 27 - 54% with the median at +43%.

**Conversely, valuations** in Q IV 2014 continued to creep up into bubble territory: at the end of the quarter the positive deviation from the median stood at:

- a) **41 - 82%** with the interpolated **median at 75%**<sup>1</sup>
- b) Largely unchanged from a range of overvaluations by 43 – 80% with the **median of 73% at the end of Q III 2014.**

**What appears more remarkable is that with market cap as % of GDP a second valuation metric has reached 2 standard deviations. The interpolated median of all four metrics now stands at ca. 1,8 standard deviations.**

---

<sup>1</sup> The median values exclude Tobin's q adjusted as an outlier

# FORUM

**European Smallcaps GmbH**

**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 ca. -4% - 0% p.a. in next 5 – 10 years in the USA.**

## **1.2 Risks**

We still see most of the general risks we have been pointing towards in past newsletters, most importantly **structural weaknesses in consumer income and spending in the USA, the China investment bubble and the €-crisis.**

We may be in the middle of new flame-up of the €-crisis with the driver being the Greek government. With elections upcoming in Spain as well and Podemos currently polled as the strongest political source there may be a second source of problematic debt negotiations. At this point in time we see the risk of Greece leaving the € as significantly higher than in 2012 – yet stock market valuations in Greece and the rest of the EU are significantly above the 2012 level.

## **1.3 Range of Outcomes**

We feel that due to the continuation – and in some parts even acceleration - of easy money **negative tail-end risk has increased.**

We will respond to this change in our assessment of the situation by **staying cautious – keeping some of our powder dry.**

Most importantly we will not join the call for investing in equities based on the claim that they are cheap relatively to bonds or all other asset classes.

## **2. Status of the Profit Cycle**

### **2.1 US After-Tax Corporate Profits as % of GDP (Appendix 2.1)**

#### **2.1.1 Total Profits**

In Q IV 2014 **US after-tax Corporate Profits** dropped slightly to **8,3%** (Q III 2014: **8,4%**) **of GDP**. Q I 2014 a new All-Time High was reached with 8,7%, thus they are now slightly below this level.

This implies a **ratio of 150% of its 85-year average since 1929** which stands at 5,5%. **This corresponds with 1,4 standard deviations** – down from 1,4 at the end of the previous quarter.

#### **2.1.2 Non-Financial Profits**

# FORUM

**European Smallcaps GmbH**

**US after-tax Non-Financial Corporate Profits** – eliminating the volatility of banking profits – **showed the same pattern:** they dropped slightly to **6,5% of GDP** – down from 6,6% at the end of Q III 2014. Again, this level is **still close to the All-Time High of 6,9%** reached in Q I 2014.

The 85-year average is 4,4%. Thus in Q IV 2014 US after-tax Non-Financial Corporate Profits stood at **147% of the long-term average. This corresponds with 1,2 standard deviations** – unchanged from the previous quarter.

## **2.2 US Corporate EBITDA (Appendix 2.2)**

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 2.2** we get similar results as outlined in the chapter above:

- a) In Q IV 2014 **Corporate EBITDA dropped back slightly to 35,3%** - after having reached an All-Time High of 35,7% in Q III 2014.
- b) As the **85-year average stands at 28,3%, the latest level of 35,3% implies a ratio of 125% of the historical mean.**

The implied deviation from historical data corresponds to **2,0 standard deviations, down slightly up from 2,1 standard deviations in the previous quarter.** This is of a clear warning signal regarding the sustainability of the current profit margins. As you know we define a threshold of 2,0 standard deviations as “bubble territory”.

Historically US Corporate EBITDA has varied within a much tighter range (23-36%) than the rest of the metrics discussed in chapter 2, for example US after-tax Corporate Profits ranged from 2% to 8,5%. This is due to EBITDA not being distorted by changes in interests, taxes or accounting of depreciation over time. As a result for the US Corporate EBITDA metric **small deviations relative to the historical average lead to high standard deviations.**

## **2.3 Pre-Tax Non-Financial ROA (Appendix 2.3)**

**Pre-Tax Return on Tangible Assets (“ROTCE”)** of the US Non-Farm, Non-Financial sector (as reported by the Federal Reserve) in Q IV 2014 **dropped from 8,0% to 7,5% of GDP.**

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. 129% of its long-term average** – in line with the other two profit metrics outlined above. **This corresponds with 1,0 standard deviations.**

## **2.4 FORUM Conclusions on Profitability**

# FORUM

## European Smallcaps GmbH

In Q IV 2014 US profits came down a bit from their high levels. Anecdotal evidence from public companies reporting their results suggests that the lower US-\$ put pressure on profits from exporting and overseas activities.

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	150%	1,4x SD
Non-Fin. Profits % of GDP	147%	1,2x SD
Corporate EBITDA Level	125%	2,0x SD
Non-Financial ROA	129%	1,0x SD.

When viewed together, the four metrics for corporate profitability in Q IV 2014 show a **reasonably consistent picture of a positive deviation of 25 – 50% from their averages with the median positive deviation at ca. 38%**. There has been a consistent decline in all metrics.

In terms of **standard deviations** the different metrics have also come down with the median at **ca. 1,3 standard deviations**. This implies a **positive deviation in the profit cycle - but is mostly below the two standard deviations we use to define a bubble - a profit bubble in this case**.

### 3. Valuations

#### 3.1 Cyclically Adjusted PE Ratios/Shiller's CAPE (Appendix 3.1)

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 27,9x for March 15th, 2015**, his latest update. On that date the S&P 500 stood at 2.115. This is a further increase from a CAPE of 27,3x reported as of December 15<sup>th</sup>, 2014, the time of our latest report with the S&P 500 at 1.990 points.

**The long-term average of CAPE since 1871 stands at 16,6x**. This implies that **current valuations have been creeping up to 168% of their long-term average**. In terms of statistical significance this valuation implies a **standard deviation of 1,7x** – up from 1,6x at the time of our latest report.

## 3.2 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. 2<sup>nd</sup> 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.

### 3.2.1 Non-adjusted Tobin's q

Based on the latest **US Federal Reserve Flow of Funds** as of December 31<sup>st</sup>, 2014 **the non-adjusted ratio has stayed nearly unchanged at 1,10** (1,08 as of September 30th, 2014).

The non-adjusted average observed since 1900 based on our calculations is 0,77, **thus q is at 141% of its long-term average**. This corresponds with **1,0 Standard Deviations<sup>2</sup>**.

### 3.2.2 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 IV 2014 **q ex statistical discontinuities (line 20 of Table R 102) stood at 1,86**, slightly up from 1,84 at the end of Q III 2014. Based on the long-term average of 0,90 this implies **a level of 203% of its long-term average resp. 2,0 standard deviations**.

## 3.3 US Equity Market Capitalization as % of GDP (Appendix 3.3)

This is a metric which Warren Buffett cites often when discussing the level of valuations in equity markets.

---

<sup>2</sup> 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.

# FORUM

## European Smallcaps GmbH

Based on the Fed data US **market capitalization as % of GDP stood at 151%** at the end of Q IV 2014, up slightly from 149% at the end of Q III 2014<sup>3</sup>.

As the 62-year average since the beginning of this time series in 1952 is 83%, this valuation implies **a premium of ca. 82% which corresponds to 2,0x standard deviations – up from 1,9x at the time of our last Macro Dashboard.**

### 3.4 Qualitative Indicators for Overvaluations

We will discuss qualitative indicators for the Q IV 2014 period, as this is in line with the reporting period on equity market valuations.

In Q IV 2014 and YTD 2014 stock markets moved as follows:

	<b>Change in Q IV 2014</b>	<b>Change YTD 2014</b>
a) S&P 500:	+4,5%	+12,4%
b) Stoxx Europe 600:	+1,8%	+4,1%

Thus in Q IV 2014 and YTD 2014 the good mood in the stock market continued its course. The main reason was again the combination of

- a) **ongoing accommodating policies of the central banks** on a global level driving investors into risk assets
- b) **ongoing deficit spending by governments** to make up for the deleveraging of the private sector. Contrary to popular reception this is true both for the USA and Europe - Europe talks about budget consolidation but acts with the will for procrastination.

Another indicator we use to measure the mood of the stock market is **volatility** – with low values corresponding to periods of optimism and high values corresponding to fearful markets.

During Q IV 2014 **volatility** in global equity markets **stayed at low levels of around 16% as measured by the VIX and 18% as measured by the VDAX**. This is a sign that most market participants are “risk off” in the current market environment.

### 3.5 Summary and Conclusions

#### 3.5.1 Summary of US-based Data

---

<sup>3</sup> The FED stopped reporting the US Market Cap in Q4 2013. Hence from Q3 2013 on we will use the quarter-over-quarter change in the Value of the S&P 500 index as a yardstick for the change in the Market Cap of US companies.

# FORUM

## European Smallcaps GmbH

Below please find a summary of the level of valuation metrics compared with their long-term averages and standard deviations **as of September 30th, 2014 for the USA:**

	<b>% of LT Average</b>	<b>Standard Deviations</b>
Shiller's CAPE	168%	1,7x SD
Tobin's q non-adjusted	141%	1,0x SD
Tobin's q adjusted for discontinuities	203%	2,0x SD
US Equity Market Cap. as % of GDP	182%	2,0x SD <sup>4</sup> .

These data on equity valuation suggest that US equity markets are **overvalued by 41 – 82%** (eliminating Tobin's adjusted q as an outlier). **The interpolated median of all four metrics is an overvaluation by ca. 75%.** This is further up from the overvaluation reported last quarter.

**What appears more remarkable is that with market cap as % of GDP a second valuation metric has reached 2 standard deviations. The interpolated median of all four metrics now stands at ca. 1,8 standard deviations.**

**This is a clear and loud warning sign! We will react to that by increasing the hedge on our long exposure – see below. If CAPE reaches bubble territory as well we would be very worried.**

### 3.5.2 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 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 expected return will depend on the time it takes for this overvaluation by a median of 75% to unwind:

<b>Years for Unwinding</b>	<b>Real Return p.a.</b>
2	negative
5	-4 - 1%
<b>10</b>	<b>-2 – 0%.</b>

### 3.6 Calibration against other Authors

#### 3.6.1 GMO

---

<sup>4</sup> All SD calculations are based on end of previous quarter numbers.

# FORUM

**European Smallcaps GmbH**

**GMO** – an asset manager whose approach we share in many respects – in their **7-year Asset Class Return forecast** as of March 31st, 2015, **expects real returns of**

- a) **-2,9%** (December 31<sup>st</sup>, 2014: -2,9%) p.a. for US Small Caps
- b) **-1,8%** (December 31<sup>st</sup>, 2014: -1,8%) p.a. for US Large Caps.

This is **even more negative than our forecasts.**

As our investment results over a cycle will be determined by the returns in equity markets in general plus an 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.**

### **3.6.2 Office of Financial Research Study on Valuation of Equities**

The USA has set up an agency charged with monitoring the prices of assets - "Office of Financial Research resp. OFR". This was done to counterbalance the position of the US Fed which has stated repeatedly that it is not her job to detect of fight asset bubbles.

This authority has recently come out with a publication which strikingly uses exactly the metrics FORUM has been using for the past years in order to assess the level of valuation in US equity markets. **We have attached this article to our Dashboard and recommend strongly reading it!**

### **3.7 European Valuations**

With regard to CAPE, **European valuations as of February 27th, 2015, differ materially from the US Market.** Based on Shiller's CAPE valuation and expected returns compare as follows (Source....):

	<b>Current CAPE</b>	<b>Hist. Average</b>	<b>Dividend Yield</b>	<b>Expected return over 10Y</b>
USA	27,9x	16,7x	1,8%	-2 – 0% p.a.
Europe	15,2x	16,0x	3,0%	4 – 5% p.a.
Emerging Markets	15,8x		3,1%	6 – 7% p.a.

Hence the European Market:

- a) is relative to the US more attractively valued
- b) but when put into historical context – namely the average for the period 1979-2013 – appears fairly valued.

# FORUM

European Smallcaps GmbH

- c) Based on actual earnings Europe trades at a PER of 22,6x – another indicator that Europe is at least not undervalued – also because the cyclically adj. PE incl. the artificially high profits in 2005-08 made especially in the banking sector

## 3.7.1 Individual Countries within Europe

The valuations in individual European countries differ materially:

Country	CAPE	Hist. Average	Expected 10Y Return	P/E 2013A
Germany	19,7x	18x	3 - 5%	18x
France	15,7x	19x	6 - 7%	25x
Italy	10,0x	17x	> 9%	317x
Spain	12,0x	17x	8 - 9%	24x
UK	13,1x	15x	7 – 8%	22x
Norway	12,0x	14x	8 – 9%	11,5x

As can be seen from the table **Germany appears to be the most ambitiously valued country on Shiller's CAPE** – likely given its relatively higher competitiveness when compared to the periphery.

The periphery conversely appears overvalued on current earnings but cheap on CAPE. In the segment below we will reason as to why the cyclically adj. PE (CAPE) is distorted.

## 3.7.2 Shiller CAPE: The Dilution Distortion

Cyclically adj. Earnings are computed by putting the stockprice in perspective to the earnings of the past 10 years – thereby arriving at a **ratio of “current stockprice” as multiple of the 10 year earnings average.**

In the case of many European countries large financial institutions (e.g. Commerzbank, Bank of Ireland, Royal Bank of Scotland etc.) have seen a large increase in share-count. This diluted per-share earnings massively – e.g. take Commerzbank as example: In 2007 the company earned € 29,19 per share – whereas in 2014 the bank earned a measly € 0,23 cents per share – a 99% collapse in per share earnings.

Now for the Shiller CAPE the 2005-2008 pre-crisis and pre-dilution per share earnings are significantly distorting the average and thereby creating an “optically Cheap CAPE” which is almost meaningless.

### 3.7.3 A Potential Cure

To cure this dilution distortion one would need to compute the Shiller CAPE not on a price per share but on an absolute basis: I.e. **relate the current market capitalization of a company to average net income over the past 10 years.**

Thereby a share count dilution does have no effect.

To look at an example of this see **Appendix 3.4** which makes the computation for Bank of Ireland: Whereas the per share CAPE stands at 0,4x the absolute CAPE amounts to a relatively high 20,6x.

## 4. Risks to US Profits and US 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

- a) **Stagnating resp. decreasing real median household income** – most of the additional income created in the last decade has gone to the top 1 – 5% of top earners. From 2003 to 2013 the share of the total household income for the top 5% earners increased from 27,1% to 27,6%. The most affected were the bottom 80% of Americans, whose share of household income decreased from 52,4% to 51,2%.
- 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 IV 2014 the level of household debt/GDP stayed largely unchanged at 76,2%<sup>5</sup>. This level is ca. 1/5 below the peak of 97,9% (non-adjusted) reached at the end of 2006.
- d) **In Q IV 2014 total debt of all sectors increased slightly to 331,7% (Sept 30th, 2014: 329,4%) of GDP.** There has been a change in methodology between Q II and Q III 2014 eliminating ca. 13 points from this count. After adjusting for the current level it is still **largely unchanged from the all-time peak level of 360%** at the end of 2009 when the financial crisis had reduced GDP.

## 5. Other Risks

### 5.1 Overview

---

<sup>5</sup> The US Government in Q2 2013 started to change the calculation of GDP by incl. R&D. This led to higher reported GDP and therefore lower debt to GDP levels. We adjusted earlier figures to warrant comparability of the data.

# FORUM

European Smallcaps GmbH

In the last Macro Dashboards we discussed the following risks:

- a) **Sovereign Debt:** between the end of Q I 2013 and Q III 2014 government debt as % of GDP in the Eurozone was stagnant at 92%. In peripheral countries like Greece it has now reached 176% and 132% in Italy. **It is clear that this debt burden will have to be restructured - at the latest when nominal interest rates begin to increase again.**

At present politicians are playing the “extend and pretend” game with Greece again to avoid the day of reckoning. What makes the negotiation unpredictable is that the Greek side is refusing even to pretend.

- b) **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.

## 5.2 FED Tapering Coming to an End

Forward looking it is very likely that the US Federal Reserve will **reduce its monetary stimulus** by phasing out its quantitative easing (i.e. tapering) program. Possible consequences will be:

- a) Higher **volatility returning to US stock markets.** The **primary effect** would be a possible correction in US stock market valuations – analogous to the mini-crash experienced in October when the Fed changed the wording of its outlook for interest rate for the first time.
- b) The **secondary effect** may well be **capital outflows from Emerging Countries** – as the implied risk premium would be lowered. This effect will most likely be strongest in Emerging Markets which have a combination of high government debt and a negative current account.

## 6. Conclusions

### 6.1 Expected Economic Conditions and Equity Returns

In summary we draw the following conclusions:

- a) We should assume that **Average Future Conditions** of the economy will be not as good as in the last up-cycle which lasted from 2003 – 2008.

# FORUM

**European Smallcaps GmbH**

- b) **Based on valuations of equity markets, equity returns in the next 5 – 10 years in the mature economies should be assumed to be plainly negative!**

## **6.2 Range of Potential Outcomes**

The spread of potential outcomes remains wide:

- a) The **liquidity** generated from the joint actions of Central Banks and governments worldwide increases the **risk of bubbles in more and more asset classes and regions being inflated to ever higher levels**. It is striking how much risk is neglected in this process.
- b) At some point this **liquidity will have to be taken out of the system**. A change in liquidity supply at this level has not been executed in most countries for several decades and entails unknown risks.

Thus we conclude that the **range of possible outcomes** has increased significantly: stock markets **could evolve further into bubble territory or correct significantly before year-end. And as always it will be impossible to time any of these directions.**

## **7. Recommendations for the Tops-Down Portfolio Construction**

This is the first Macro Dashboard for many quarters which signals that valuations of stock markets are getting into dangerous territory. We are therefore deviating from our default allocation and recommend starting building up hedges against a major correction in the stock markets. This can encompass

- a) **Put options**
- b) **Short positions** in the pockets of the market which are most overvalued, e.g. internet stocks
- c) **Cash level at ca. 20% of AUM** in order to be able to take advantage of an unexpected drop in equity prices or company-specific events.

We will comment on these issues in our **Letter to Clients**.

# FORUM

European Smallcaps GmbH

## Table of Appendices

No.	Content
1.1	Historical Relationship between Valuation and Returns for CAPE
2.1	US Corporate Profits as % of GDP
2.2	US Corporate EBITDA
2.3	US Corporate Profitability measured as ROA
3.1	Cyclically Adjusted PR-Ratios (Shiller`s CAPE)
3.2	Tobin`s q
3.3	Capitalization of US companies as % of GDP

# FORUM

European Smallcaps GmbH

## Appendix 1.1: 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

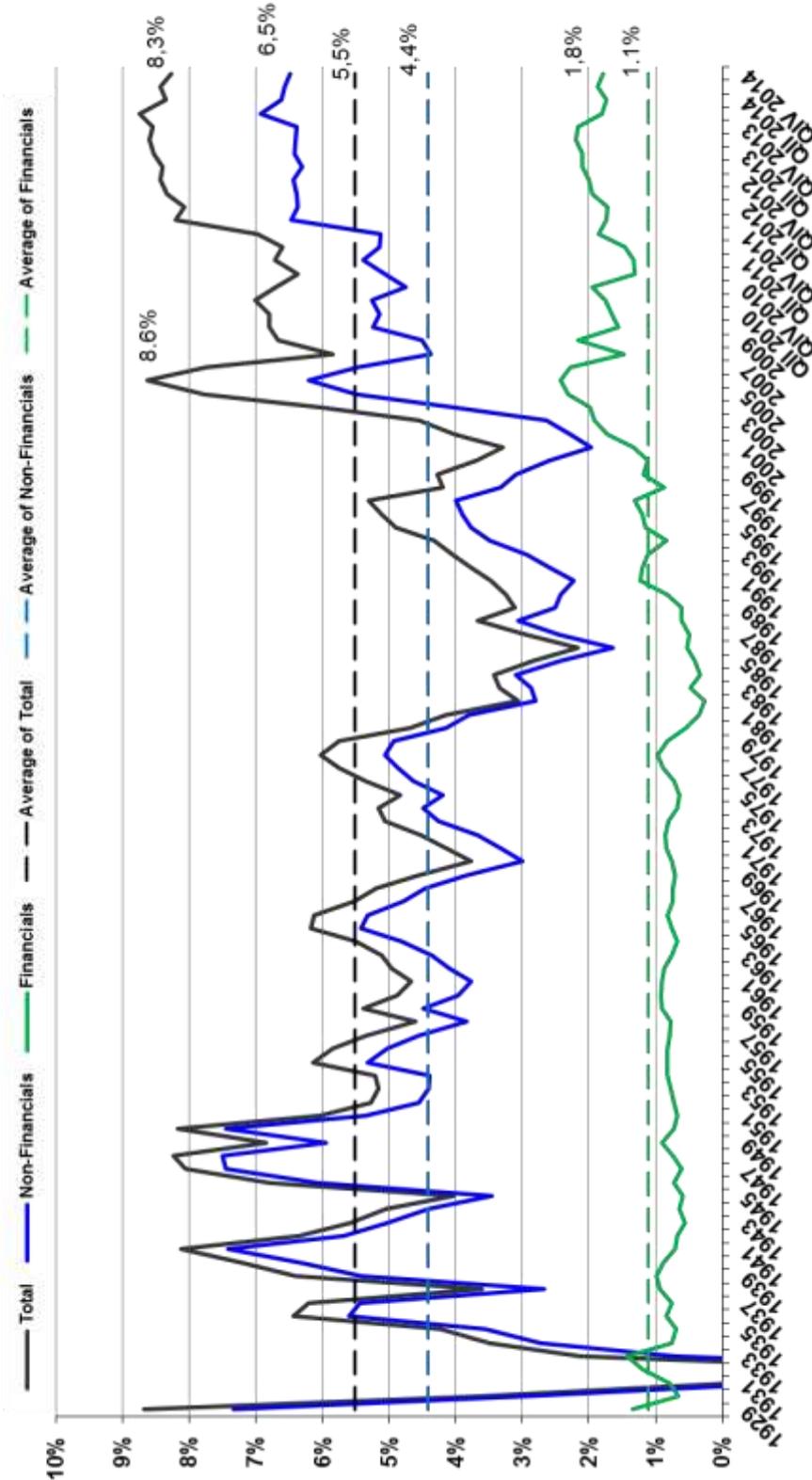
	Deviation from average as a # of standard deviations	# months	Nominal return		
			2 years	5 years	10 years
<b>Negative deviations</b>	Less than -3	1	14.5%	5.2%	9.9%
	Between -3 and -2	79	5.3%	4.8%	7.0%
	Between -2 and -1	294	7.8%	7.8%	4.6%
	Between -1 and -0.5	226	10.5%	6.8%	6.6%
	Between -0.5 and 0	159	7.8%	5.3%	6.3%
<b>Positive deviations</b>	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%
<b>Total</b>		1530	5.0%	4.8%	4.7%

Period covered: 1881-2010

Source: Shiller, FORUM Research

## Appendix 2.1: Corporate Profits as % of GDP

**US Corporate Profits as Share of GDP**  
**QIV 2014: 8,3%**

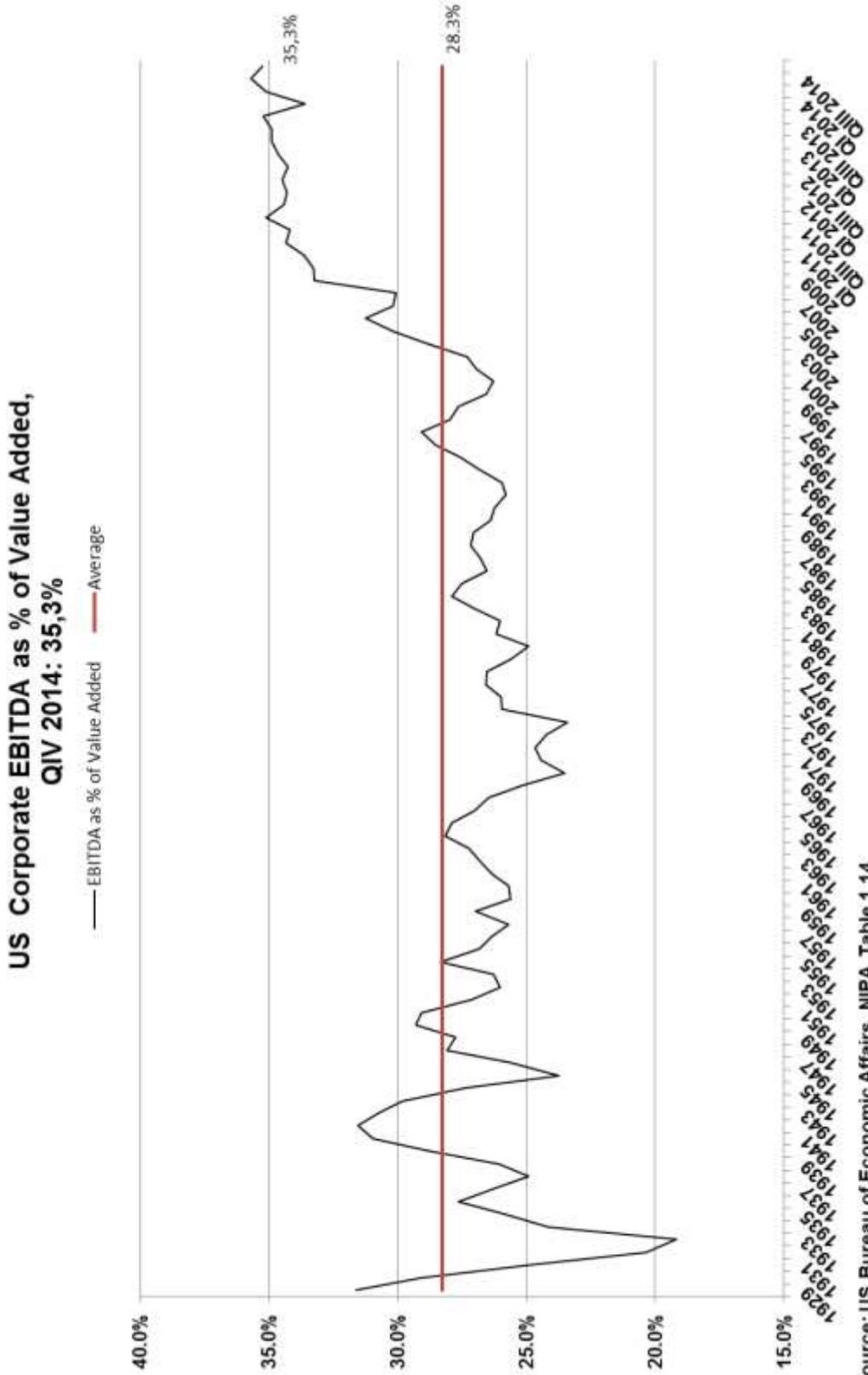


Source: US Bureau of Economic Affairs (BEA), NIPA Table 1.14

# FORUM

European Smallcaps GmbH

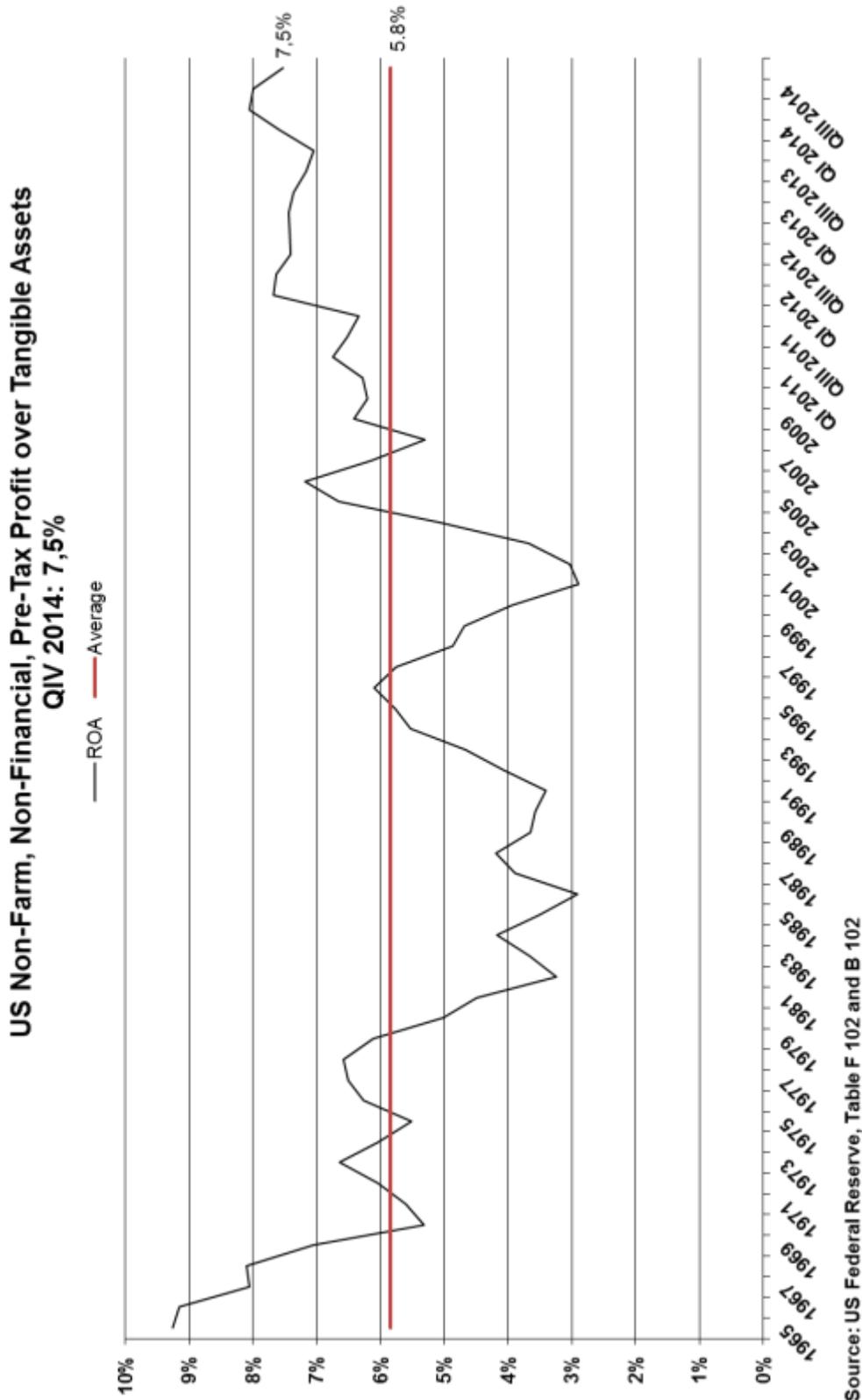
## Appendix 2.2: Corporate EBITDA



# FORUM

European Smallcaps GmbH

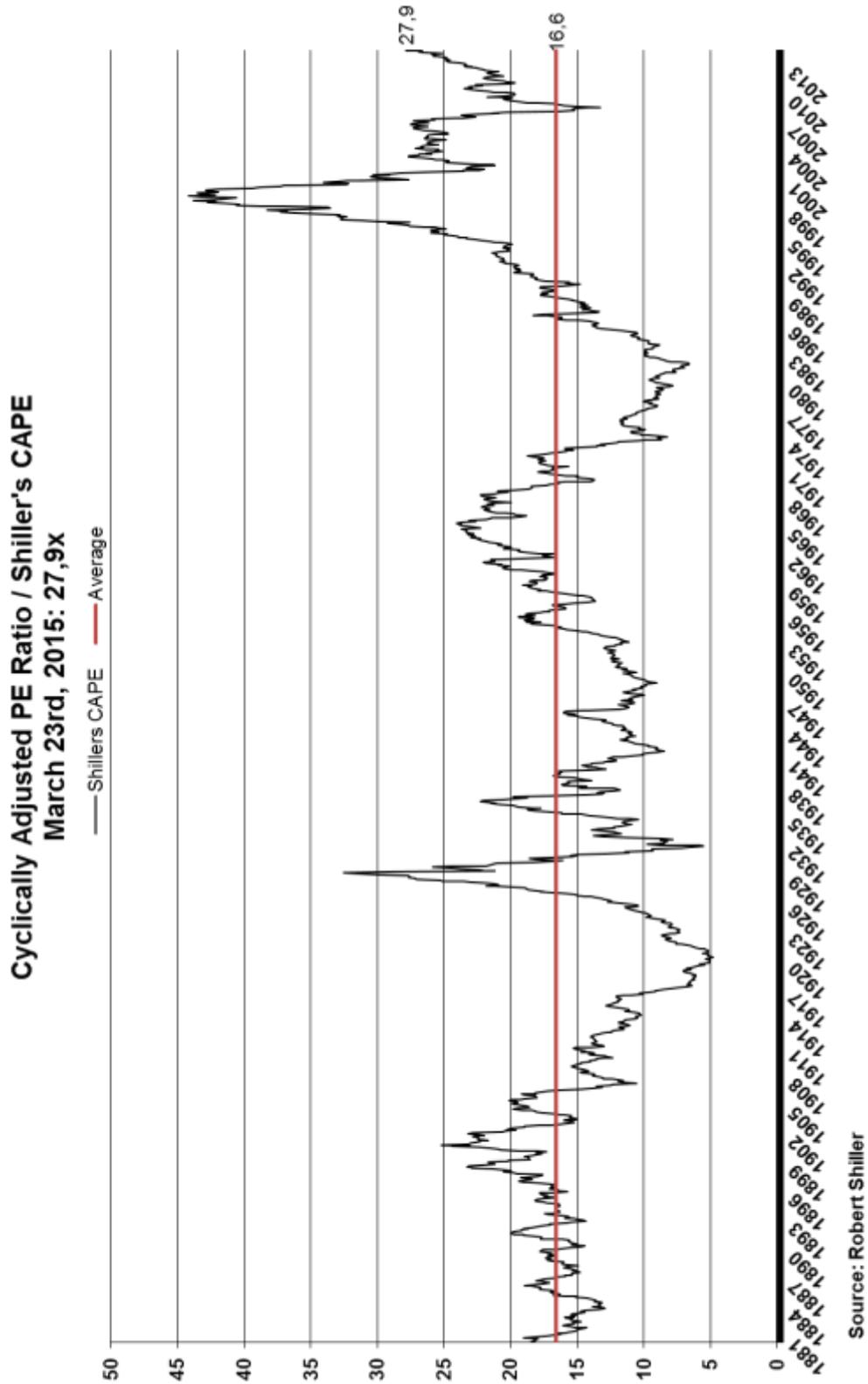
## Appendix 2.3: Corporate Profitability Measured as ROA



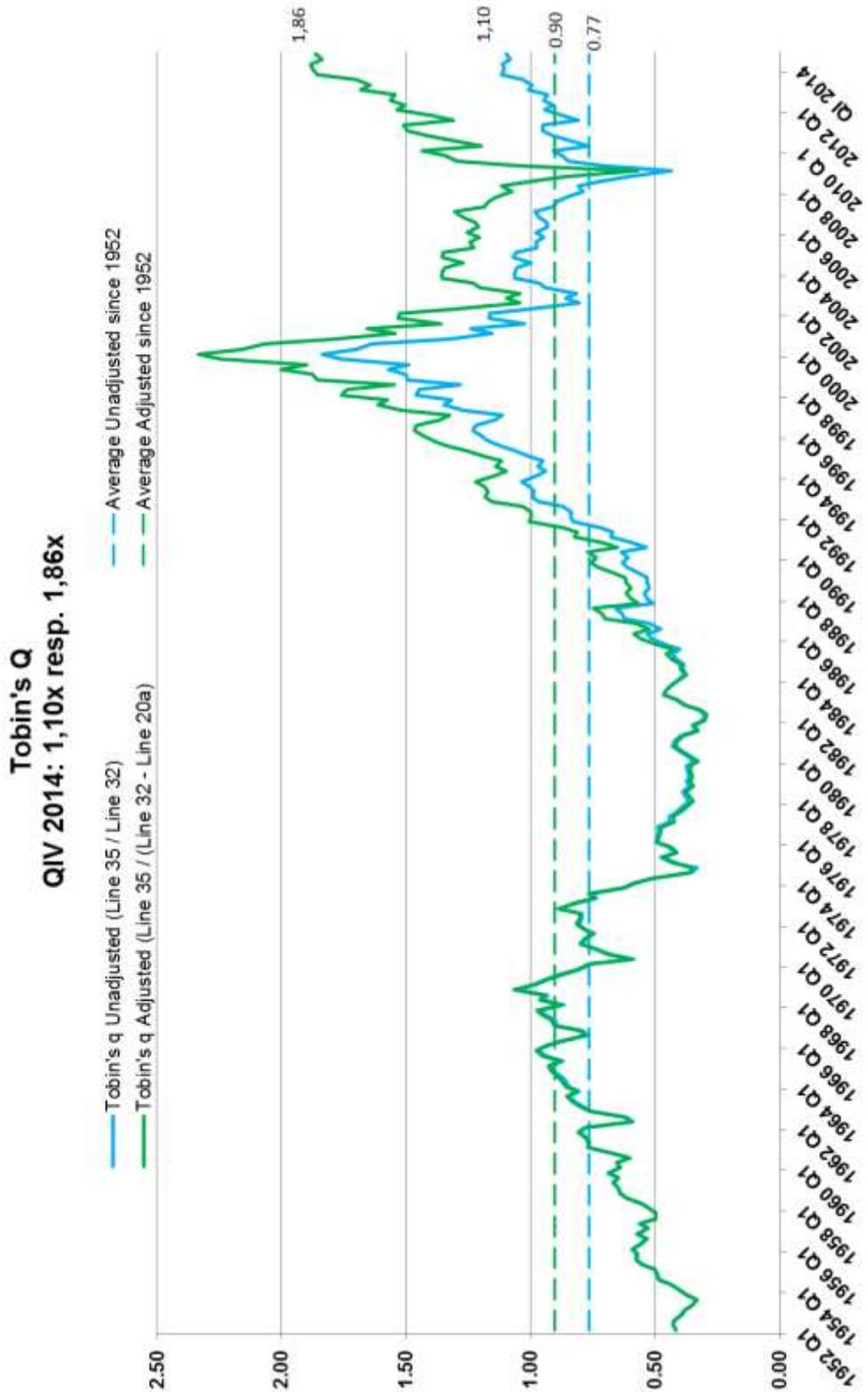
# FORUM

European Smallcaps GmbH

## Appendix 3.1: Cyclically Adjusted PE Ratios/Shiller's CAPE



## Appendix 3.2 – Tobin's Q

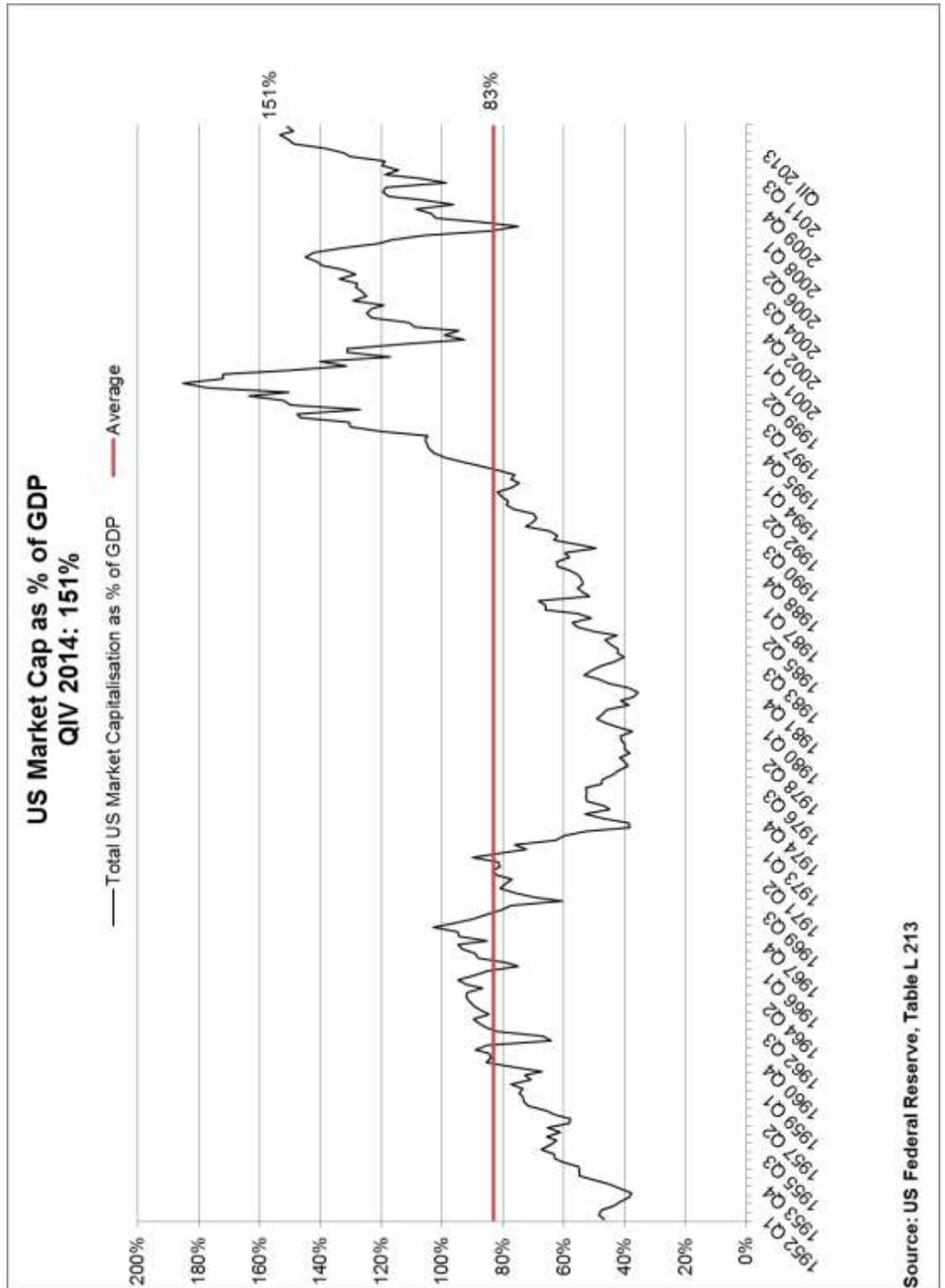


Source: US Federal Reserve, Table B 102, R 102 Line 20

# FORUM

European Smallcaps GmbH

## Appendix 3.3 – Capitalization of US companies as % of GDP



# FORUM

European Smallcaps GmbH

## Appendix 3.4 – Per Share CAPE vs. Absolute CAPE for the Bank of Ireland

		Bank of Ireland						
	CPI	Shares (MM)	Price	Cap (\$MM)	Net Inc (\$MM)	Real Net Inc (\$MM)	Real EPS	
2004	91.86	24	505.50	12,233	1,129	1,287	53.17	
2005	94.27	24	633.40	15,138	1,398	1,553	64.96	
2006	98.42	24	745.10	17,957	1,600	1,702	70.63	
2007	103.19	24	865.00	20,587	2,231	2,263	95.10	
2008	105.83	24	603.80	14,552	2,674	2,645	109.77	
2009	99.74	25	26.50	655	91	96	3.87	
2010	100.59	95	26.50	2,525	-821	-854	-8.97	
2011	103.36	393	4.24	1,665	58	59	0.15	
2012	104.49	753	6.50	4,893	-2,426	-2,431	-3.23	
2013	104.70	756	14.41	10,898	-663	-663	-0.88	
Price	15.42							
				Per Share CAPE	0.40			
				Absolute CAPE	20.62			

Source: <http://www.philosophicaleconomics.com/2014/11/dilution-index-evolution-and-the-shiller-cape-anatomy-of-a-post-crisis-value-trap/>