FORUM

European Smallcaps GmbH

Memorandum

To	:	BW, FES Team
From	:	MB
Copy to	:	
Date	:	January 29th, 2024
Subject	:	Macro Dashboard Q IV 2023 V_2.1

A. Summary of Results

The key metrics we monitor in this Macro Dashboard have stayed largely unchanged since our last report:

a) **In Europe** the levels of profitability as well as equity valuations stay **largely close to their historical averages** - there are neither sign of either an inflated, non-sustainable level of corporate profitability or a valuation bubble. **Thus, going forward, we expect average returns.**

b) **In the USA** the **level of profitability is elevated by 60% above historical averages** resp. trend-line growth. More significantly equity valuations are significantly inflated and have gone up further. **Both valuation metrics we use stand at 180-220% of their historical averages, implying standard deviations of 1,9-2,5x. This signals a bubble.**

O**n the risk side** global economic and political risks appear have clearly increased, i.e., the outcome of the war in Ukraine and the geostrategic implications, other military conflicts and tight monetary policy. High 10-year bond yields in the USA ~4% will lay open a lot of risky financing structures which were not stress-tested for such an evolution.

As a result, we **maintain our recommendation of a tops-down portfolio structure:**

a) 15 – 20% cash

b) 5 – 10% short exposure

B. Europe

1. Levels of Profitability

1.1 Introduction

Aggregate European data for the level of profitability in Europe or the €-area have only been available since ca. 2000. To get long time series, we have decided to **focus on the national statistics of Germany and France.** These countries jointly account for ca. 40% of the GDP of the Euro zone.

1.2 Corporate Profits Germany

Appendix B.1.2.a. shows that the German Gross Operating Surplus plus Gross Income as % of Gross Value-Added **increased to 40,3% in Q IV 2023 from 39,3% in Q IV 2022**. This metric is a "high-level" indicator for profitability in the corporate sector.

The 20-year average for this metric is 41,7%. Thus, in Q IV 2023 this profit metric stood at **97% of its long-term average**.

The **second metric** we use for monitoring the level of profitability in Germany is the **time series for the last-twelve months ("LTM") EPS of the DAX 30 German index. Appendix B.1.2.b** shows that **aggregate LTM EPS as of December 29th, 2023, decreased to € 962,7** from **€ 1.115,4 same time last year** – a decrease by ca. **13,7%**. This number is based on reported – not adjusted – profits, thus it includes all one-off negative effects like write-downs on assets.

In the historical comparison DAX 30 EPS is now converging **back to the multi-year trendline.**

1.3 Corporate Profits France

In France we obtained a 74-year time series on the Corporate EBITDA as % of Gross Value Added - see **Appendix B.1.3.a**. In Q IV 2023 this metric **declined to 31,8%**. The 74-year average is 31,5%. Thus, in Q IV 2023 French Corporate EBITDA stood **at 101,0% of its long-term average**.

The **second metric** for monitoring corporate profitability in France is the time series of LTM EPS for the CAC All Tradeable index – **Appendix B.1.3.b.** The Appendix shows that **aggregate EPS in Q IV 2023 declined to € 241,6 from € 260,8 same time year ago – a decrease by ca. 7,3%.** A look at the graph shows that this profit metric continues to be clearly above **the trend-line but converging back.**

Thus, the conclusion on the level of corporate profits in France is that they are getting back to their multi-year historical trendline.

2. Valuation

2.1 Shiller´s CAPE in Europe

Shiller´s Cyclically-**A**djusted **P**rice **E**arnings Multiple **(or CAPE)** is a metric introduced by Robert Shiller 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.

The primary source for this data is **Research Affiliates**. Our data is drawn from the JP Morgan Guide to Markets as a secondary source. **Appendix B.2.1.1** shows the 27-year evolution of this metric. The basis is the **MSCI Europe index.**

Current CAPE stands at 17,8x (December 29th, 2023) The 27-year average of CAPE Europe since 1996 stands at 19,2x**.** This implies that **current valuation stands at 93% of their long-term average.** We would have expected a much higher valuation – thus are positively surprised that **current valuations in Europe are supported by 10-year average profits.**

2.2 Summary of Valuations in Europe

In summary both

a) levels of profitability

b) valuations

in Europe are very close to their historical averages – **no sign for overvaluation or a bubble.**

C. USA

1. Status of the Profit Cycle

1.1 US After-Tax Corporate Profits as % of GDP (Appendix C.1.1)

1.1.1 Total Profits

In Q IV 2023 **US after-tax Corporate Profits** were 9,0% (vs. 9,0% in Q IV 2022) **of GDP**.

The current level of profitability implies a **ratio of 149% of its 94-year average since 1929** which stands at 6,1%. **This corresponds with 1,4x standard deviations.**

1.1.2 Non-Financial Profits

In Q IV 2023 **US revised after-tax Non-Financial Corporate Profits** – eliminating the volatility of banking profits – increased to 7,6% vs. 7,3% in Q IV 2022.

The 94-year average is 4,8%. Thus, in Q IV 2023 US after-tax Non-Financial Corporate Profits stood **at 157% of its long-term average. This corresponds with 1,5x standard deviations**.

1.2 US Corporate EBITDA (Appendixes C.1.2.a and C.1.2.b)

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 C.1.2.a** in Q IV 2023 Corporate EBITDA stood at 35,2% of Gross Value Added, slightly down from 35,9% in Q IV 2022.

Appendix C.1.2.b shows that the share accounted for by **wages** as % of GDP increased to 34,7% (vs. 33,1% in Q IV 2022).

As the 94-year average of Corporate EBITDA stands at 30,0% of GDP, the latest level implies **a ratio of 117% of its historical average.** The implied deviation from historical data corresponds to **1,2x standard deviations – decreased from Q IV 2022**.

Historically US Corporate EBITDA has varied within a much tighter range (23-36%) than the rest of the metrics discussed in Chapter 2.1, e.g. US after-tax Corporate Profits ranged from 2% to 8,5%. This is due to EBITDA being "higher up" in the profit funnel, with **less exposure to the operating gearing** from depreciation, interests, and taxes which magnify the relative rate of changes.

1.3 S&P 500 – Earnings per Share (Appendix C.1.3)

In Q IV 2023 TTM **statutory earnings per share** (“**EPS**”) of the S&P 500 stood at $ 181,8 – up 2,5% from $ 177,4 in Q IV 2022.

Appendix C.1.3 shows that EPS was growing strongly above its trend line after the financial crisis 2008/09. The main driver were the tax cuts, of course, thus date is not directly comparable. Currently EPS is **roughly 80% above the level of profits implied by the trend-line growth rate** which is around an EPS of $ 100,-.

1.4 FORUM Conclusions on US Profitability

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

Metric	% of LT Average	Standard Deviations
Total Profitability as % of GDP	149%	1,4x SD
Non-Fin. Profits % of GDP	157%	1,5x SD
Corporate EBITDA Level	117%	1,2x SD
S&P 500 eps (vs. trend line)	~180%	n.a.

We therefore conclude that the level of profits still appears to be at levels way above historical levels or trendlines.

2. Valuations

2.1 Cyclically Adjusted PE Ratios / Shiller´s CAPE (Appendix C.2.1.a)

Prof. Shiller reports **a CAPE of 30,8x for September 30th, 2023.** On that date the S&P 500 stood at 4515,8. This compares to a CAPE of 28,23x on September 30th, 2022.

The long-term average of CAPE since 1871 stands at 17,4x**.** This implies that **current valuations stand at 177% of their long-term average – up from 163% from Q IV 2022.** In terms of statistical significance this valuation implies a **standard deviation of 1,9x, up from 1,51x**.

Thus, we continue to see valuations which are the second highest in history after the 1999 bubble – above the level achieved before the Great Recession in 1929. **This is plainly worrying as there is lots of historical evidence that in the subsequent years returns to shareholders have been poor – see below.**

2.2 US Equity Market Capitalization as % of GDP (Appendix C.2.2)

This is a metric which Warren Buffett cites often when discussing the level of valuations in equity markets. The numerator is the value of corporate equities as recorded on the balance sheet of the Fed.

Based on the Fed data for market capitalization and BEA data for GDP **US market capitalization as % of GDP increased to 177,7% at the end of Q IV 2023** (vs. **152,5% at the end of Q IV 2022)**.

As the 71-year average since the beginning of this time series in 1952 is 81%, this valuation implies **a level of 218% which corresponds to 2,5x standard deviations – up from Q IV 2022 (187%, 1,86x).**

2.3 Summary and Conclusions

2.3.1 Summary of US-based Data

Below please find below a summary of the level of the valuation metrics compared with their long-term averages and standard deviations **as of September 30th, 2023, for the USA**:

	% of LT Average	Standard Deviations
Shiller´s CAPE	177%	1,9x SD
US Equity Market Cap. as % of GDP	218%	2,5x SD[1]

Both metrics suggest that US equity markets are **overvalued**. We define bubble when a level of 2x standard deviations is exceeded, thus according to Schiller's CAPE we are close to a bubble and according to Warren Buffett's metric we still are in a bubble.

This does not exclude a scenario whereby equity valuations continue to increase for many more years – **just the probabilities are against that.**

D. Comparison Europe: USA

The following table **summarizes the 2x2 matrix we have de-been facto talking about** (the figures are % relative to their long-term average):

	Europe	USA
Profits	~ 100%	~ 160%
Valuation	~ 90%	~ 190%

Thus, Europe appears perfectly in order. There is room for profit growth for some years without building up a bubble.

The "elephant in the room" is **the massive overvaluation of US equities** – in combination of profits which are very elevated by historical standards.

If it corrects, this will also affect European valuations. But given the situation in the left side of the matrix we cannot afford to pull in our horn too much as valuations in Europe could well increase by 20 - 30% from money being re-directed from the USA to Europe. **Thus, we will stay invested at a high degree.**

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

E. Risks

The analysis above shows that the **levels of profitability and valuation in Europe do not signal an elevated level of risk as they are close to their long-term averages.**

Share prices in Europe may go down as well if we see a correction in the USA. This is a risk we do not see as critical as we focus on the Intrinsic Values of our portfolios – in the long-term share prices will follow the Intrinsic Values.

The risks for a potential impairment of the earnings power value of our portfolio **come from**

a) a recession which is triggered by the tightening of the monetary policy.

b) the war in Ukraine and its economic consequences.

This is a Macro perspective; thus, we cannot comment on the resilience of our holdings. But the answer we would have to these risks is that the top 3 holdings in our portfolio should be able to weather these risks and continue to grow earnings and Intrinsic Values.

F. Conclusions for the Tops-Down Portfolio Construction

1. Expected Market Returns

If one believes in the Mean-Reversion characteristics of valuation, the most likely assumption on expected returns on European equities in the next 5 – 10 years would be **returns in line with historical averages.**

Conversely, expected returns from US equities are below long-term averages. The expected return will depend on the time it takes for this **overvaluation to unwind. Appendix F.1 shows the expected market returns going forward.**

As history shows with such predictions, the actual outcome will most likely not be a linear development, **but the losses may come in very concentrated periods**. And the highest risk of a market correction by 10 – 20% is now – when valuations are highest!! **This describes the basis scenario which FORUM wants to position its portfolio for.**

2. Cash Level

Our traditional level of net cash is ca. 20% of net assets. Given our expectations for risks and returns we prefer to **keep liquidity at this level or slightly below.**

3. Shorting Exposure

We continue to want to have a short exposure of 5 - 10%. But we will need names with a clear catalyst – not just overvaluations – otherwise the risk of being killed from momentum is too high.

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Appendix 1.1: Historical Relationship between Standard Deviations and Returns for CAPE

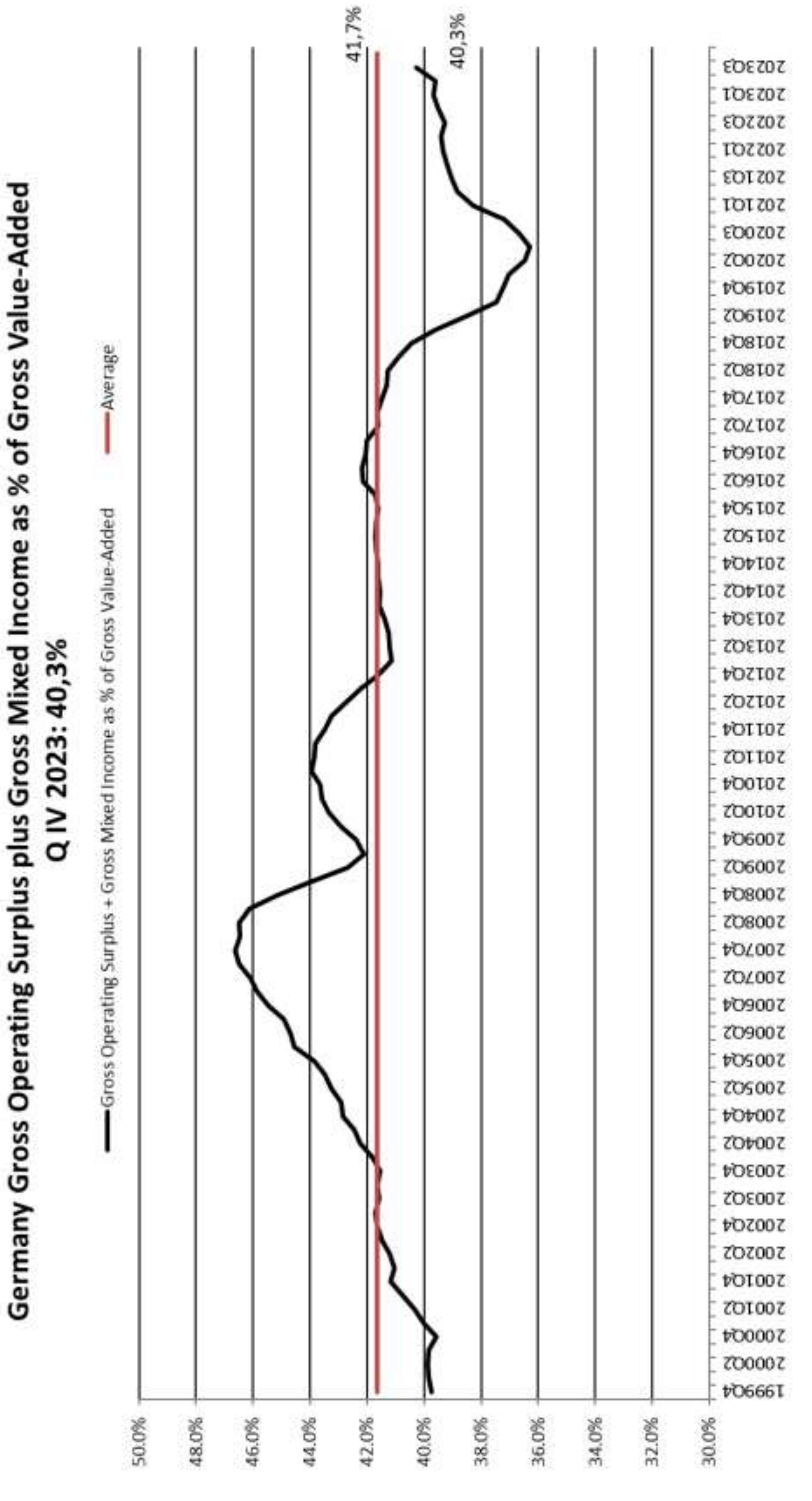
Stock Market Return as a Function of # Standard Deviations from Average PE/ 10

Status as of November 2nd 2010

	Deviation from average as a # of standard deviations	# months	Nominal return 2 years	5 years	10 years		
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%	48%	86%
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%		

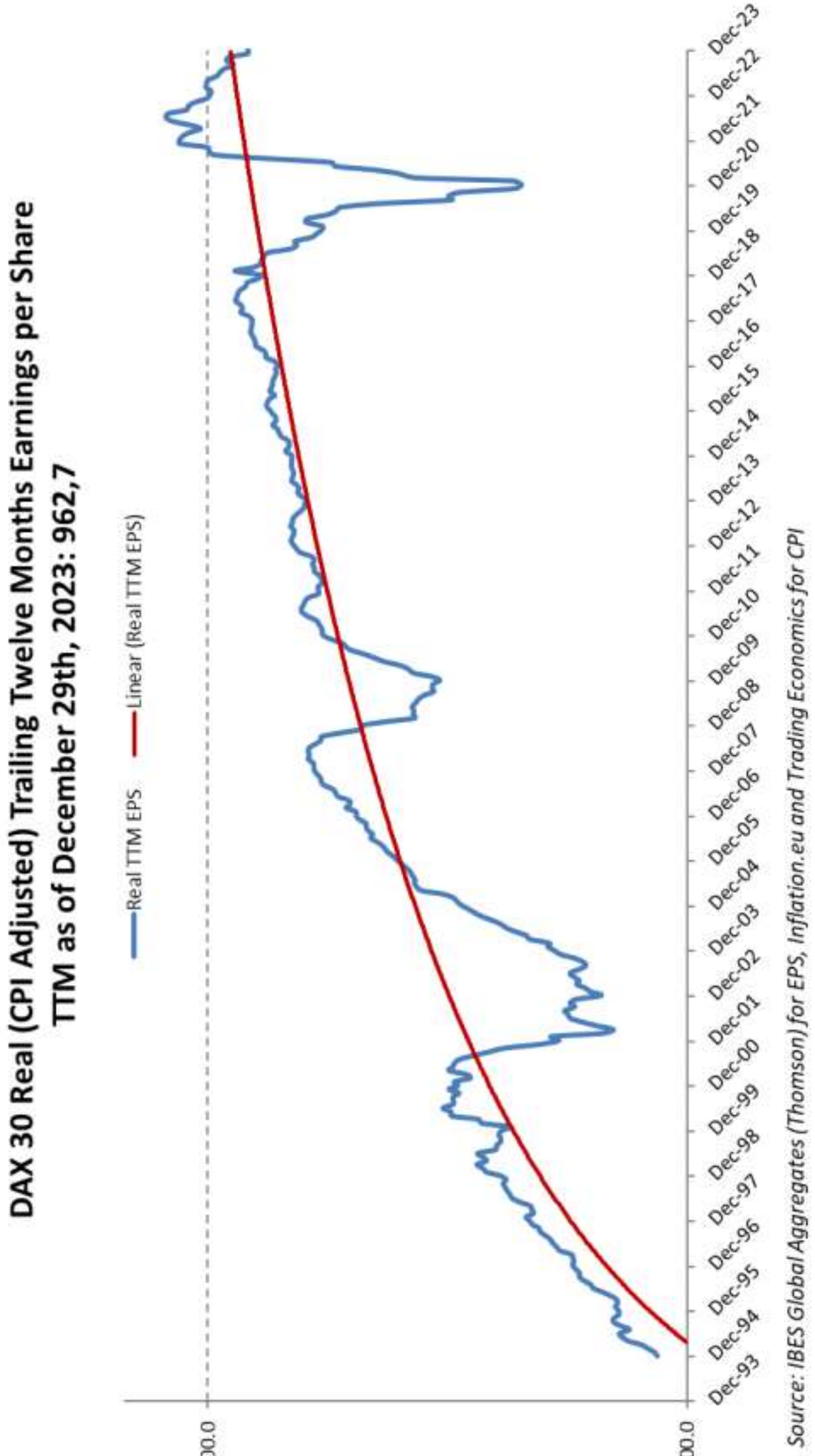
Period covered: 1881-2010
Source: Shiller, FORUM Research

Appendix B.1.2.a – German Gross Operating Surplus plus Gross Income as % of Gross Value-Added

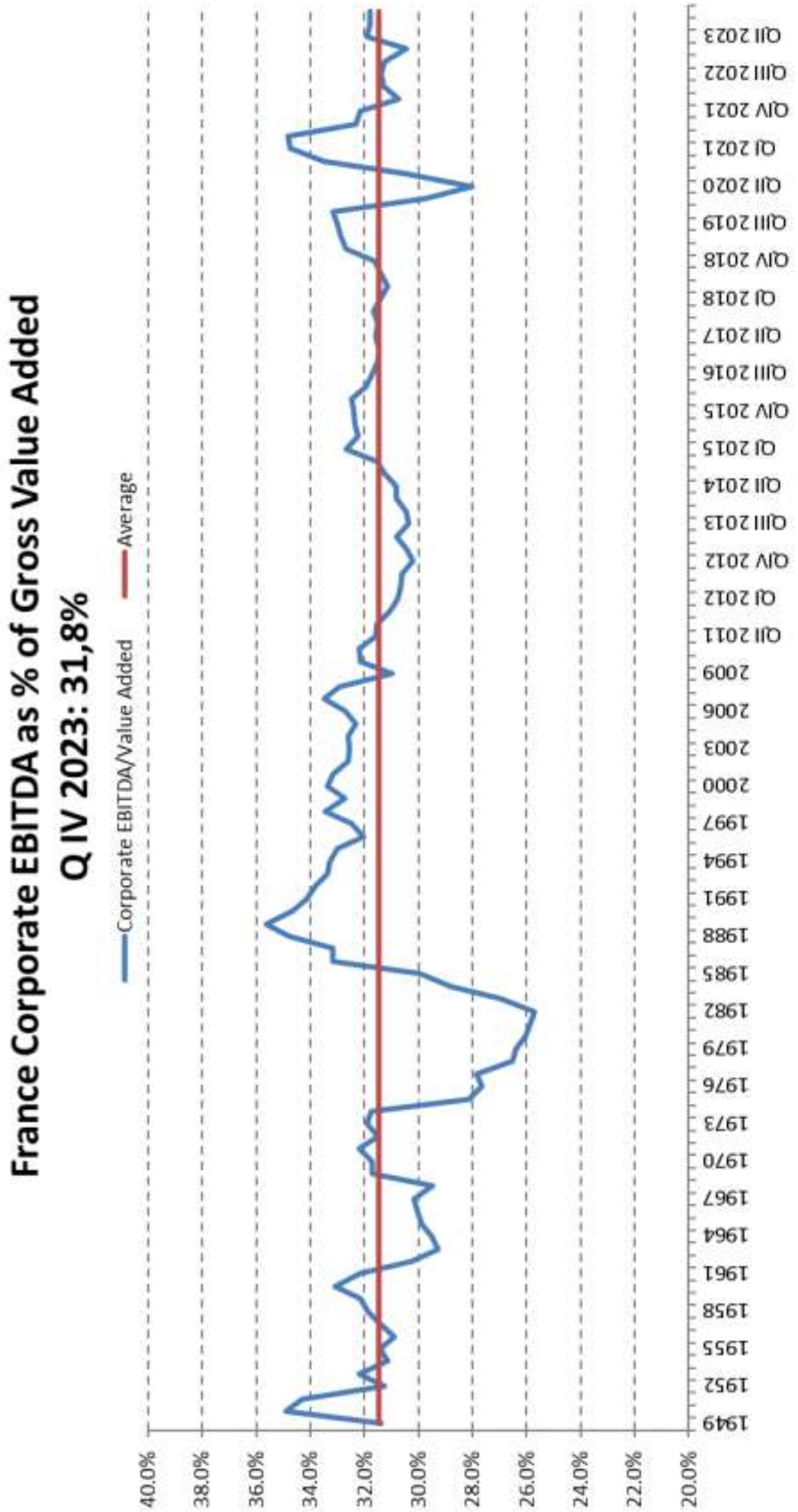


Source: Destatis.de

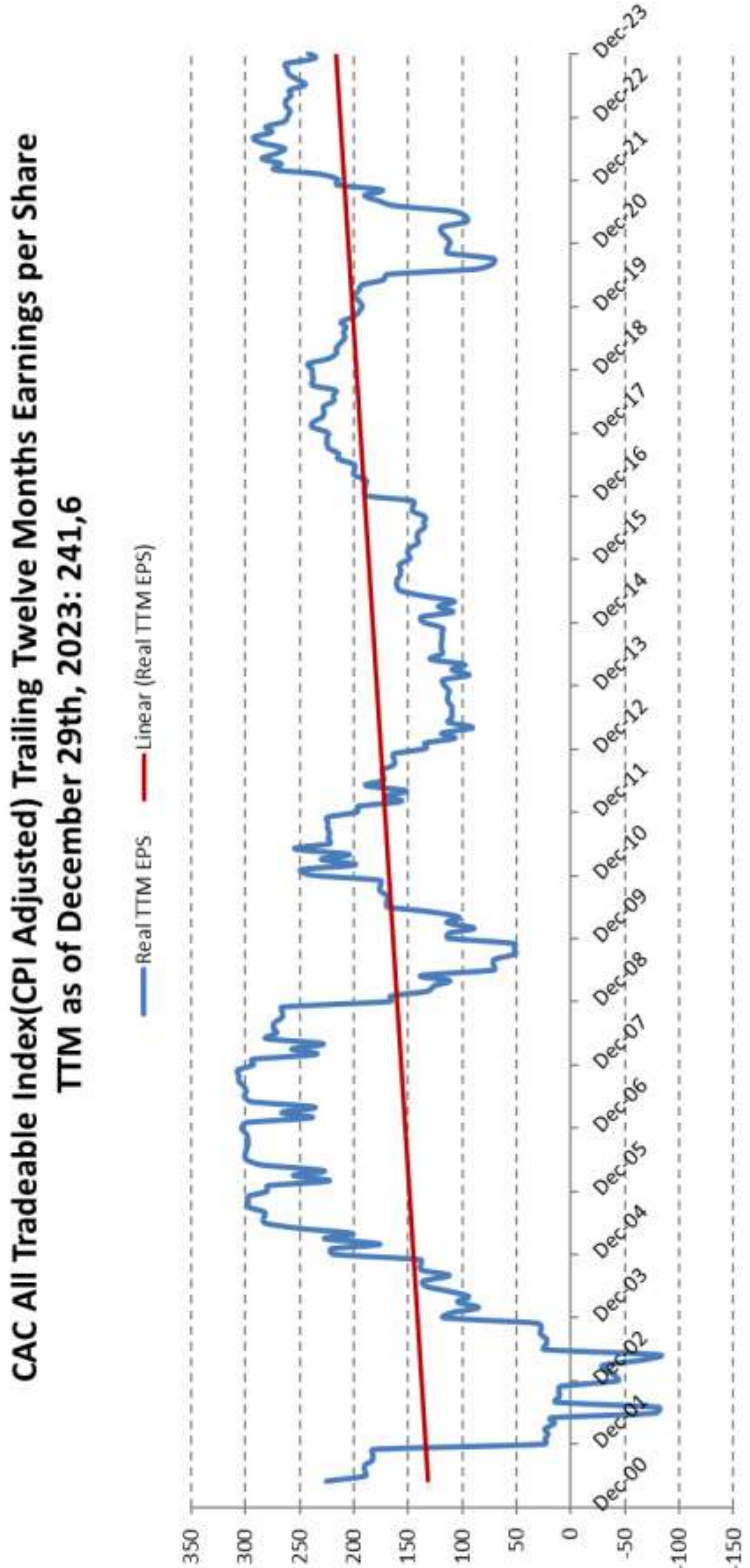
Appendix B.1.2.b – Real (CPI Adjusted) TTM EPS of DAX 30 Index (Germany)



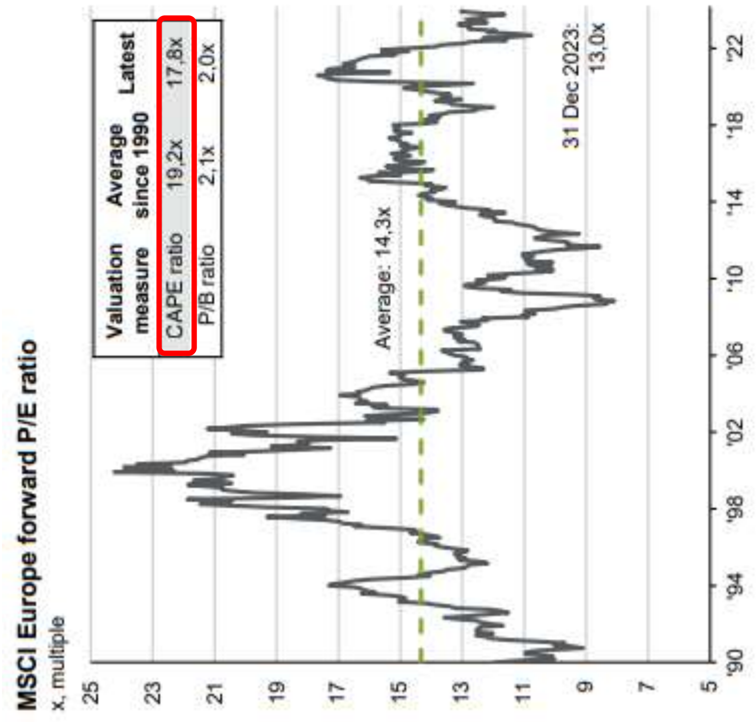
Appendix B.1.3.a - France Corporate EBITDA as % of Gross Value Added



Appendix B.1.3.b – Real (CPI Adjusted) TTM EPS of CAC All Tradeable Index (France)

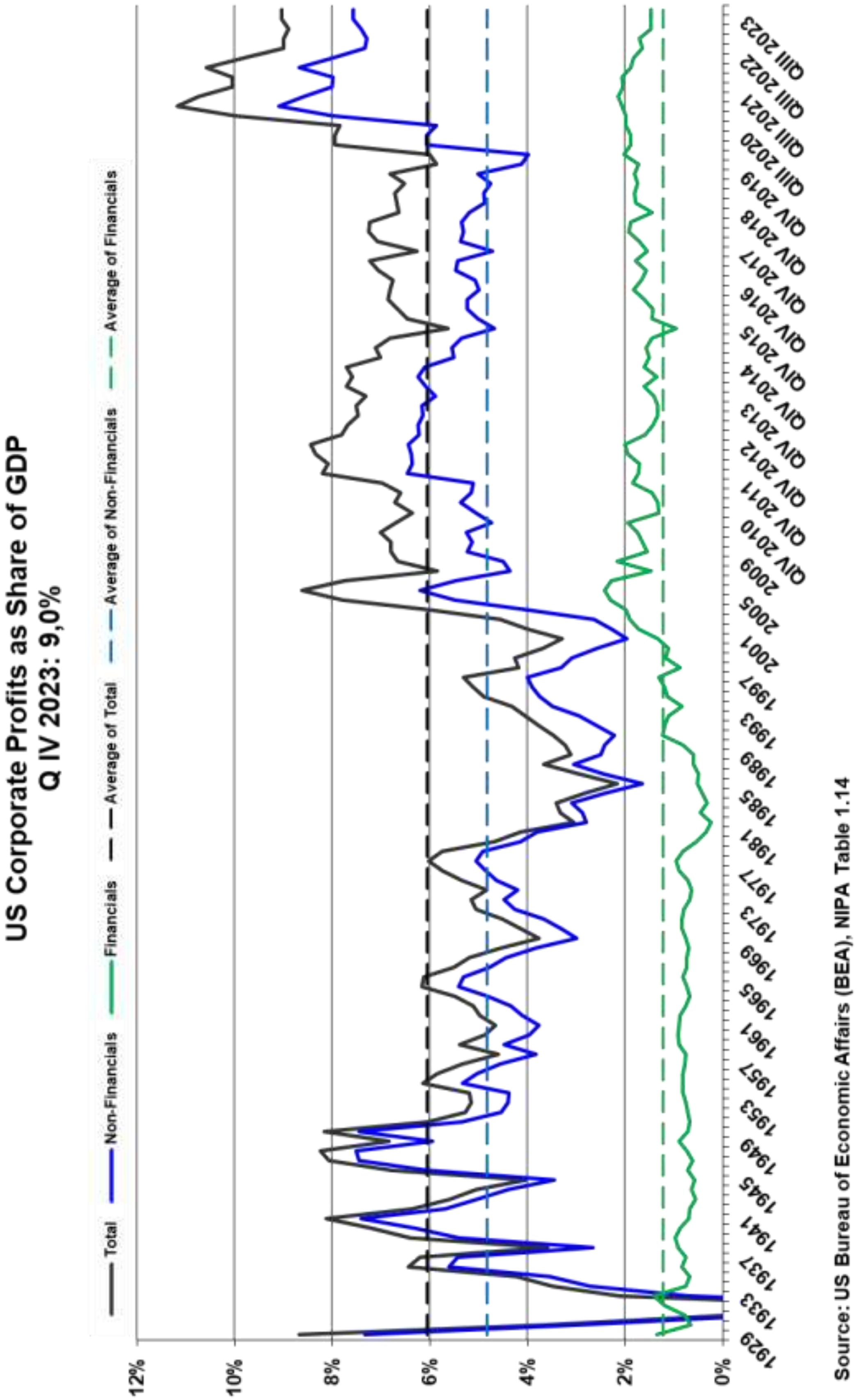


Appendix B.2.1.1 - MSCI Europe CAPE Ratio

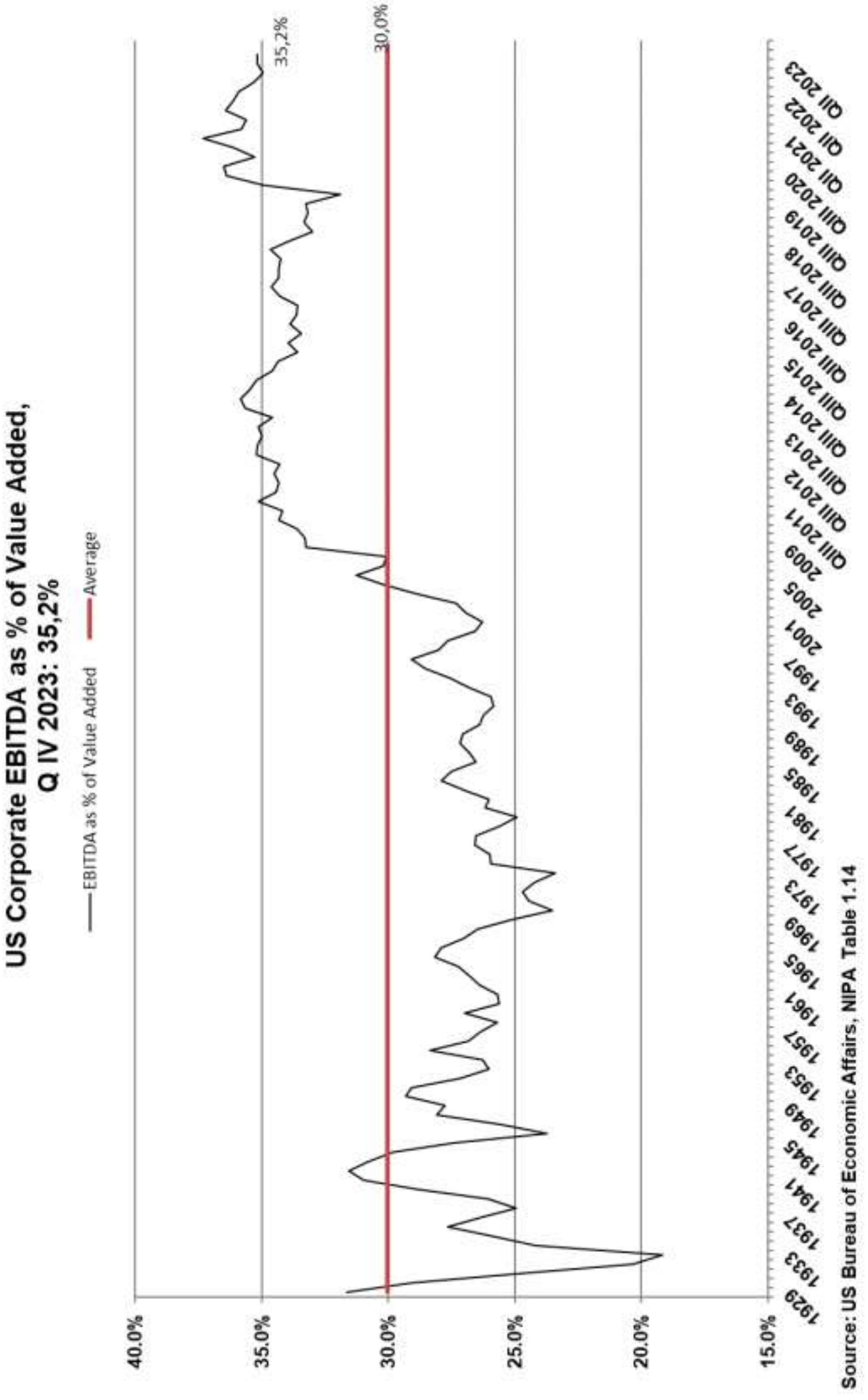


Source: JPM Guide to Markets (QIV 2023)

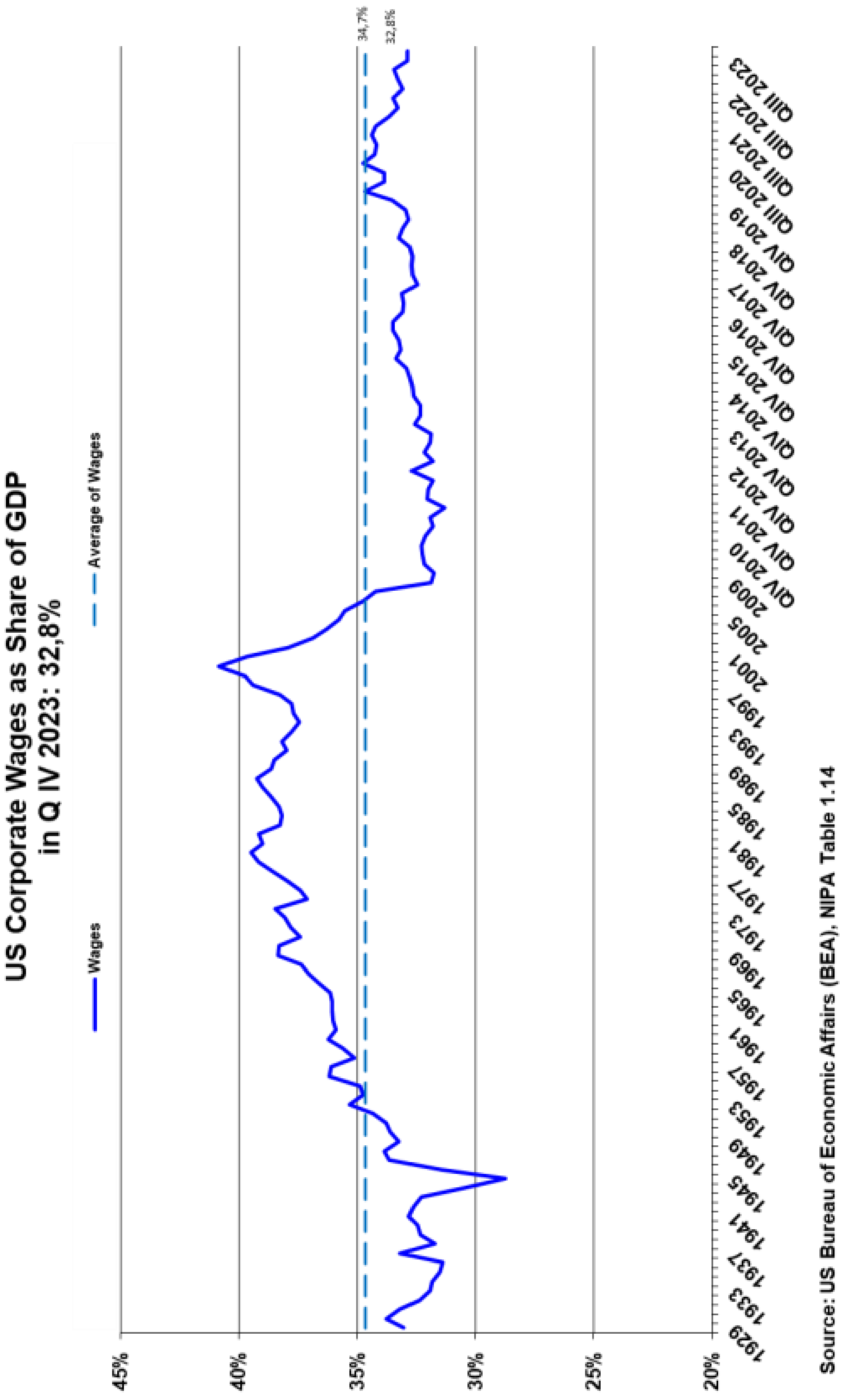
Appendix C.1.1 – US Corporate Profits as % of GDP



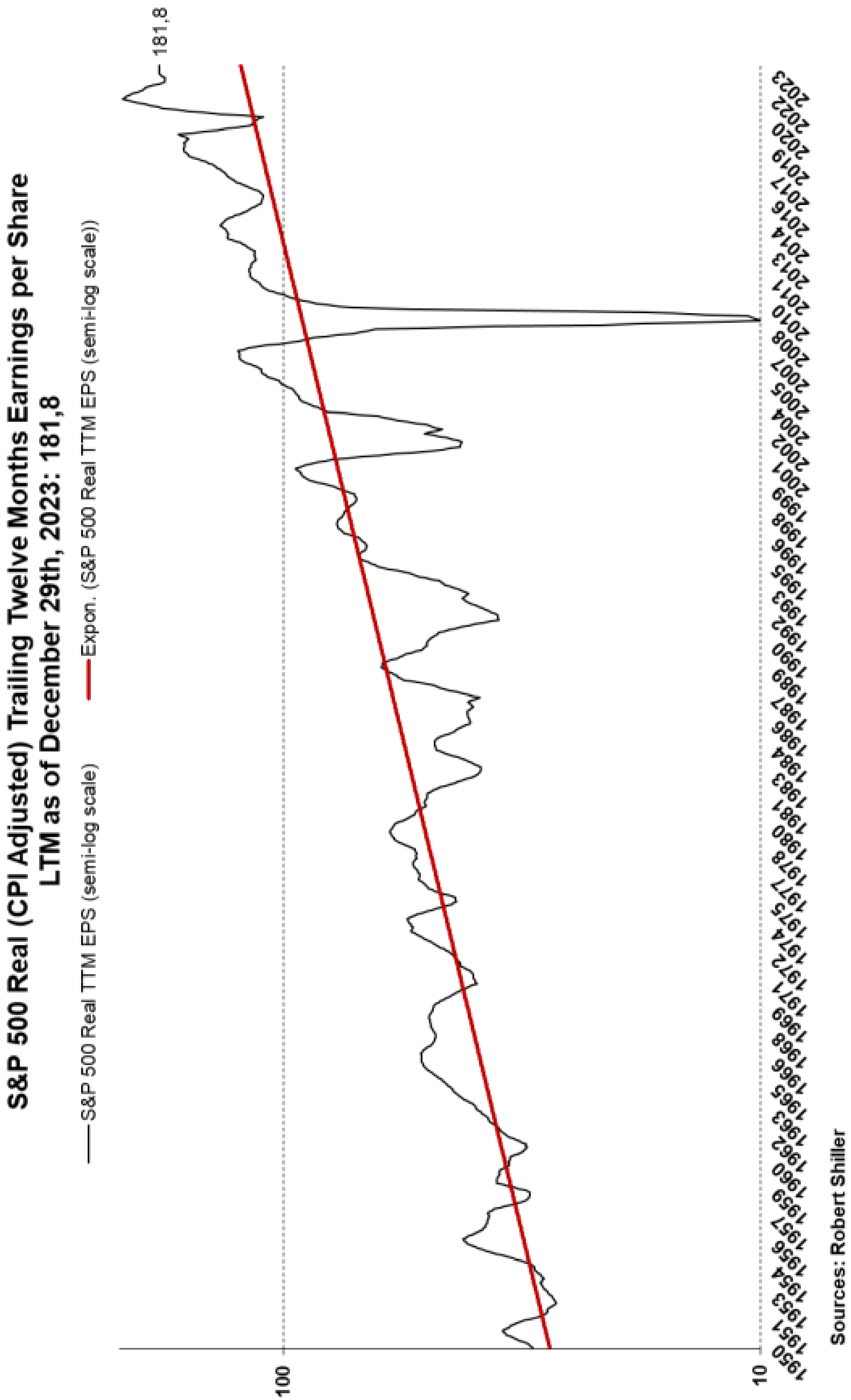
Appendix C.1.2.a - US Corporate EBITDA as % of Gross Value Added



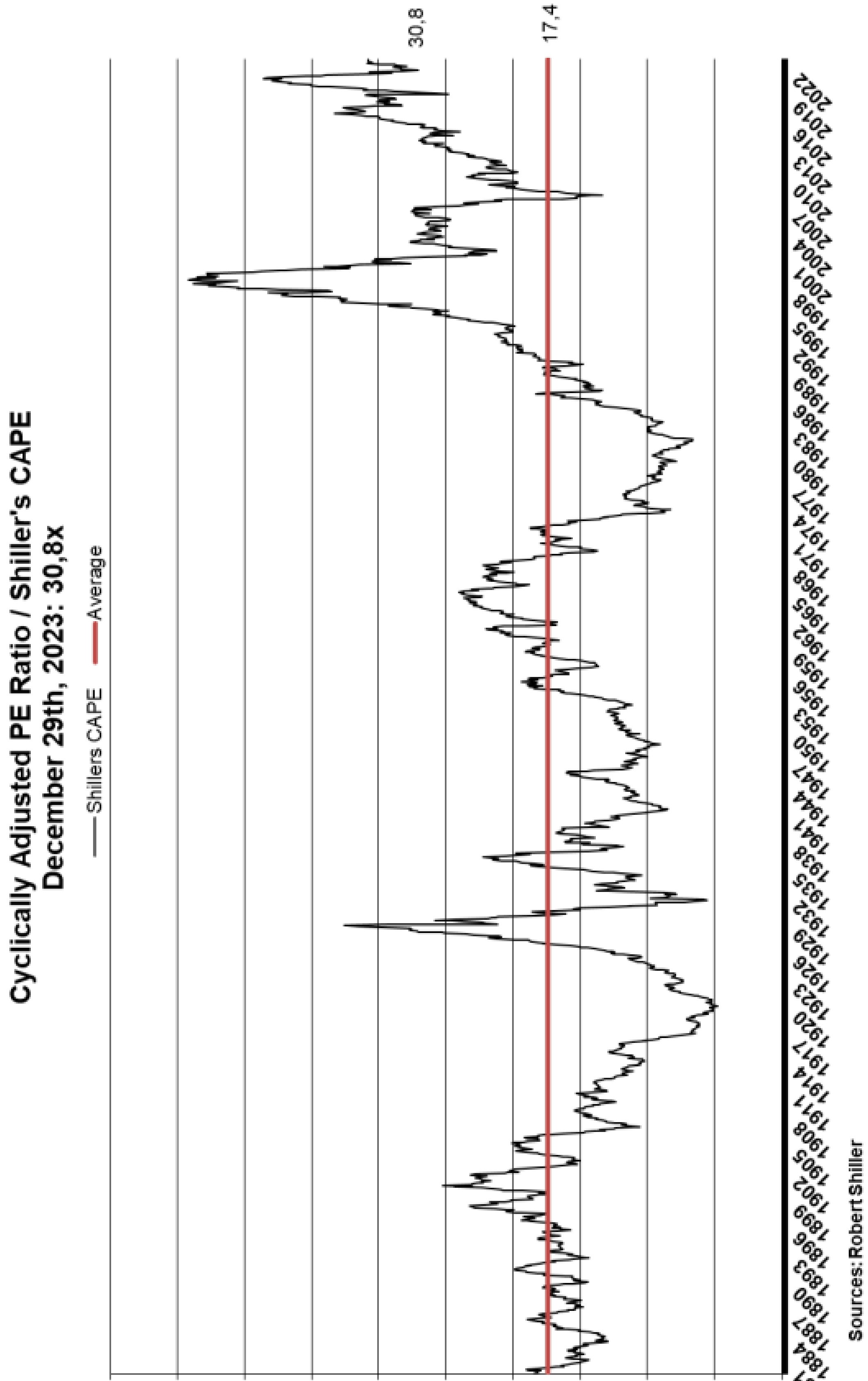
Appendix C.1.2.b - US Corporate Wages as % of GDP



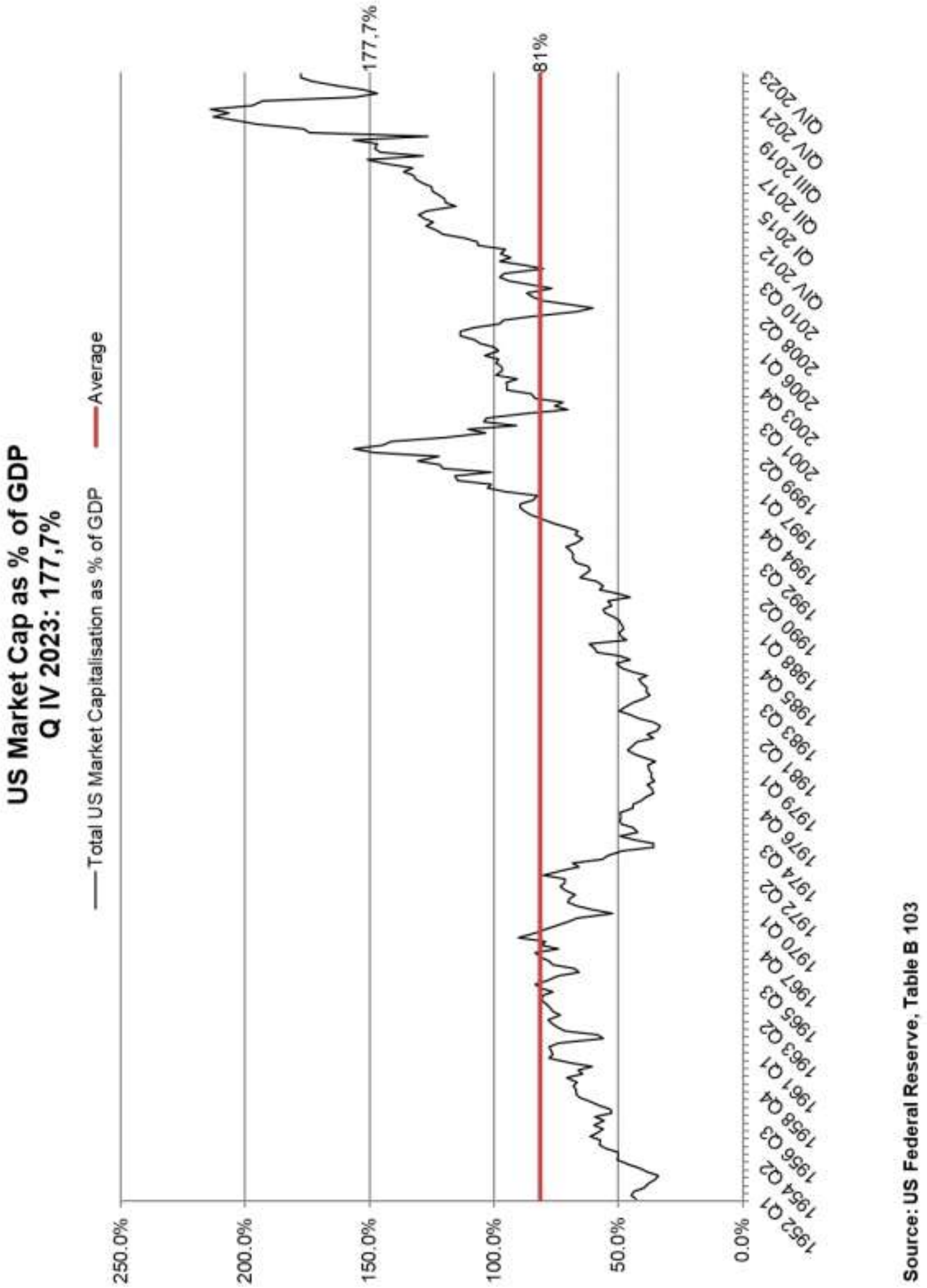
Appendix C.1.3 - Real (CPI Adjusted) TTM EPS of S&P 500



Appendix C.2.1.a - S&P 500 Cyclically Adjusted PE-Ratios (Shiller`s CAPE)



Appendix C.2.2 - Capitalization of US Companies as % of GDP



https://www.currentmarketvaluation.com/models/buffett-indicator.php

F.1 Expected Returns of Equity Markets USA and Europe

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