

A light blue world map is centered in the background of the slide.

# eurex

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*The Economics Behind Eurex  
European Financial Products*

*June 2009*

# Presenter

**Richard Asplund, Chief Economist, CRB/Barchart.com**

**Covering global financial markets for 25 years**

**MBA, Univ of Chicago Graduate School of Business**

**Interviews on CNBC, Bloomberg TV, Fox, National Public Radio**

**Quoted by Dow Jones, Reuters, USA Today, Newsweek, others.**

**Editor of weekly “Eurex European Market Outlook”**

**Features: weekly focus factors; central bank and economic previews; stock and bond market commentary; global financial calendar; Eurex quotes**

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## Agenda

- **The Euro-Zone**
- **Euro-Zone Economic Indicators**
- **European Interest Rate Markets**
- **European Stock Index Markets**

# The Euro-Zone

# Euro-Zone or Euro Area

## Euro-Zone - Countries that use the euro

**Blue:** Euro-Zone: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain (16)

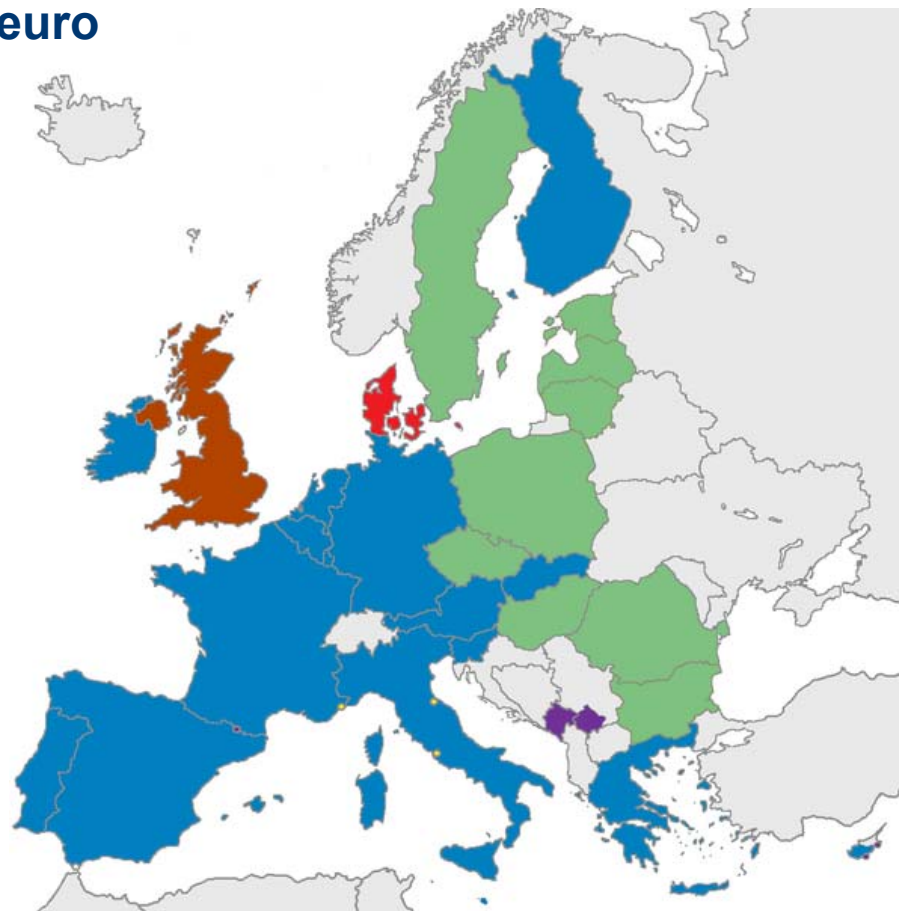
**Green:** EU states obliged to join the Eurozone (9)

**Brown:** U.K. has an opt-out on Eurozone participation

**Red:** Denmark plans to hold a referendum on the euro and with an opt-out on Eurozone participation

**Not in the Euro-Zone -- Of the 27 European Union (political union) countries, 11 do not use the euro:**

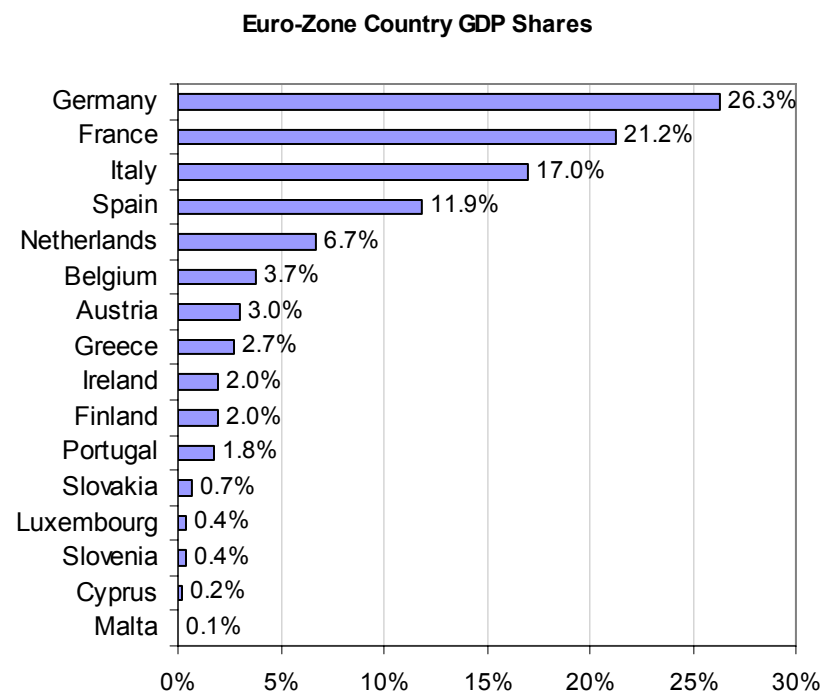
Denmark, Sweden, UK, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania.



Graphics source: [http://en.wikipedia.org/wiki/Euro\\_zone](http://en.wikipedia.org/wiki/Euro_zone)

## Country GDP Shares in Euro-Zone

**Big Four account for about three-quarters of Euro-Zone GDP (Germany, France, Italy, Spain).**







# Euro-Zone vs U.S. and Japan

## KEY CHARACTERISTICS OF THE EURO AREA \*



EUROPEAN INTEGRATION

	 €-15	 EU-27		
Population (millions)	319	495	302	128
GDP (PPP, € trillions)	8.9	12.6	12.0	3.7
GDP per capita (PPP, € thousands)	27.8	25.4	39.6	29.0
Share of world GDP (PPP, %)	16.1	22.7	21.3	6.6
Exports (goods and services, % of GDP)**	22.6	14.2	11.8	18.4
Gross fixed capital formation (% of GDP)	21.7	21.2	18.7	23.3
Gross saving (% of GDP)	22.5	20.8	13.4	29.6

\* 2007 \*\* The figure for the euro area excludes Cyprus and Malta  
Sources: for euro area and EU: ECB, Eurostat, national data, IMF and ECB calculations; for the United States and Japan: national sources, IMF.

© EUROPEAN CENTRAL BANK EI.010 06/08

Source: European Central Bank

# The Euro

Common currency came into existence 1-Jan-1999 (bank notes 1-Jan-2002)

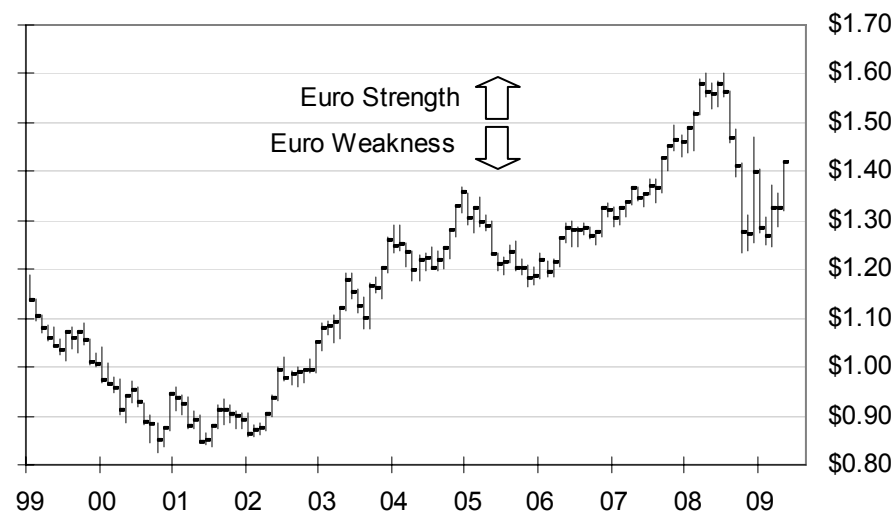
Success story –

- Euro reduced transaction costs and exchange rate risk within Euro-Zone
- Euro has been a strong currency due to ECB's inflation resolve
- Euro is increasingly held by global central banks as a reserve currency
- Euro aided Euro-Zone during global financial crisis

## Euro Market Factors

- Euro showed strength from 2006 to mid-2008 as dollar weakened on emerging US housing crisis;
- Euro fell during the late-2008 financial crisis as dollar rallied on safe-haven buying;
- Euro regained strength in 2009 due to reduced safe-haven demand for dollar liquidity and stronger euro interest rate differentials.

Euro (US\$ per Euro)

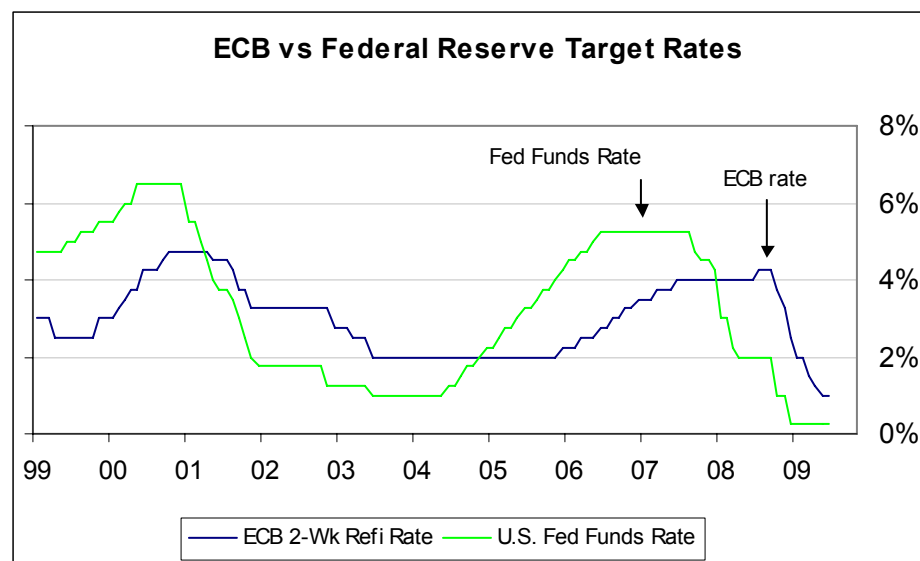


## European Central Bank (ECB)

- Responsible for monetary policy in the Euro-Zone. Primary policy goal is to keep inflation (HICP-Harmonized Index of Consumer Prices) “below, but close to, 2% over the medium term.”
- ECB Governing Council holds policy meetings on the first Thursday of each month, with policy announcements at about 7:45 AM Eastern time followed by a press conference by ECB President Jean-Claude Trichet.
- Key target rates: 2-week refinancing rate (1.00%), marginal lending facility rate (1.75%), deposit facility rate (0.25%).

### Current ECB Policy

- 2-week refinancing rate at record low of 1.00% (rate is “appropriate”)
- Emergency non-standard measures include unlimited liquidity provided to banks for up to 1-year
- Covered bond purchase program up to 60 billion euros (to revive bank-to-mortgage fund flows)



## **Euro-Zone Economic Indicators**

### **Sources of info:**

#### **Data: Eurostat**

<http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes>

#### **“Principal European Economic Indicators – A Statistical Guide,” Eurostat, 2009 edition**

[http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?  
p\\_product\\_code=KS-81-08-398](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-81-08-398)

## **Economic Indicators With Largest Impact on European Bond Market\***

- 1. U.S. Non-Farm Payrolls**
- 2. U.S. GDP**
- 3. U.S. ISM Manufacturing Index**
- 4. U.S. Core CPI**
- 5. German IFO**
- 6. German ZEW**
- 7. German GDP**
- 8. U.S. Philadelphia Fed Index**
- 9. U.S. ISM Non-Manufacturing Index**
- 10. U.S. Consumer Confidence (Univ Mich)**
- 11. U.S. Retail Sales**
- 12. German Lander CPI**
- 13. Euro-Zone M3**
- 14. Euro-Zone Manufacturing PMI**
- 15. U.S. CPI**
- 16. U.K. GDP**
- 17. German Factory Orders**
- 18. German Retail Sales**
- 19. German Industrial Production**
- 20. U.K. Retail Sales**
- 21. U.K. CPI**
- 22. Euro-Zone Flash CPI**
- 23. Euro-Zone Industrial Production**
- 24. Euro-Zone Retail sales**
- 25. Euro-Zone Business Confidence**
- 26. Euro-Zone GDP**
- 27. Euro-Zone Consumer Confidence**
- 28. German CPI**

\*According to study by Royal Bank of Scotland, "What moves the European bond market?" March 8, 2007.

# Euro-Zone GDP

## Euro-Zone GDP Quarterly (yoy%)

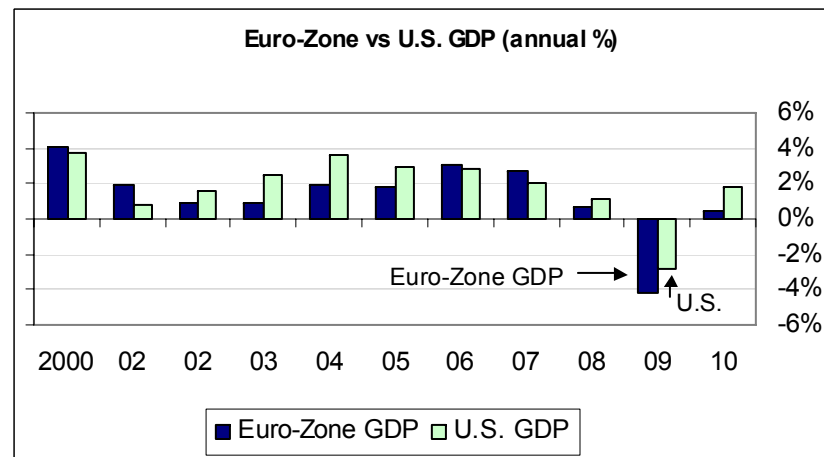
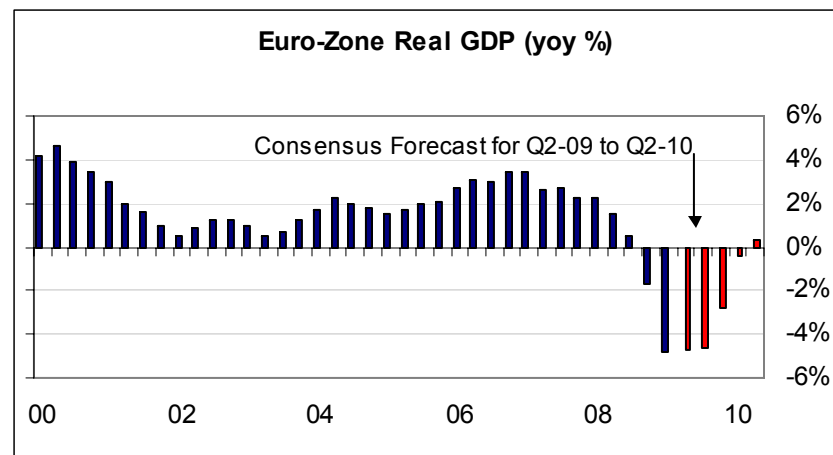
- Trough of -4.8% expected in Q1-09;
- Consensus forecasts:
  - Q2-09: -4.7%
  - Q3-09: -4.6%
  - Q4-09: -2.8%
  - Q1-10: -0.4%
  - Q2-10: +0.3%

## Euro-Zone Annual GDP

- 2008: +0.6,
- 2009est: -4.2%
- 2010est +0.5%

**Euro-Zone 2000-08 avg GDP: 2.0%**  
 (0.3 pct points less than +2.3% for U.S.)

Note: Consensus Forecasts from Bloomberg Survey



# Consumer Price Index

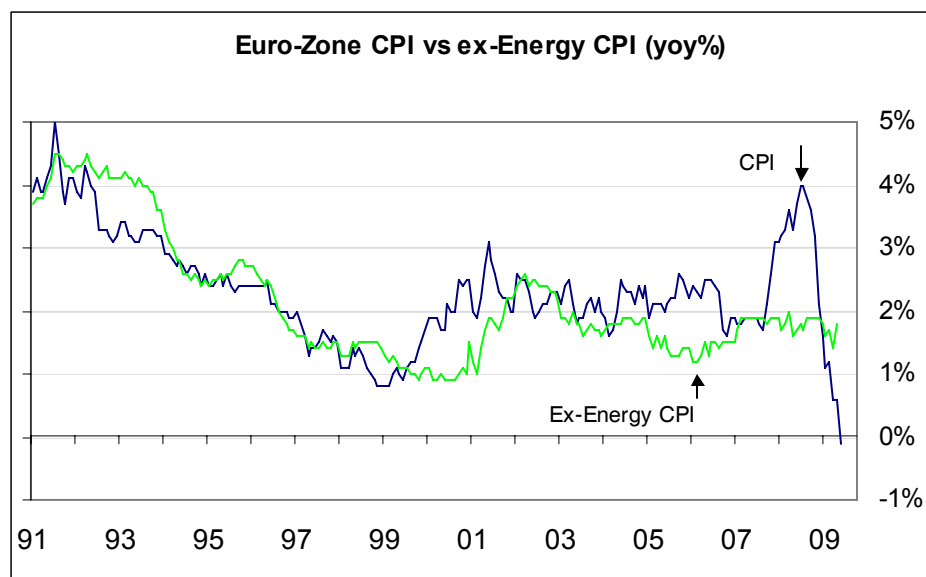
**ECB CPI Target:** “below, but close to, 2% over the medium term.”

**Current CPI Figures:**

- **May CPI -0.1% y/y**
- **April ex-Energy CPI: +1.8% y/y, right at ECB inflation target**

**ECB Mid-Point CPI Forecasts:**

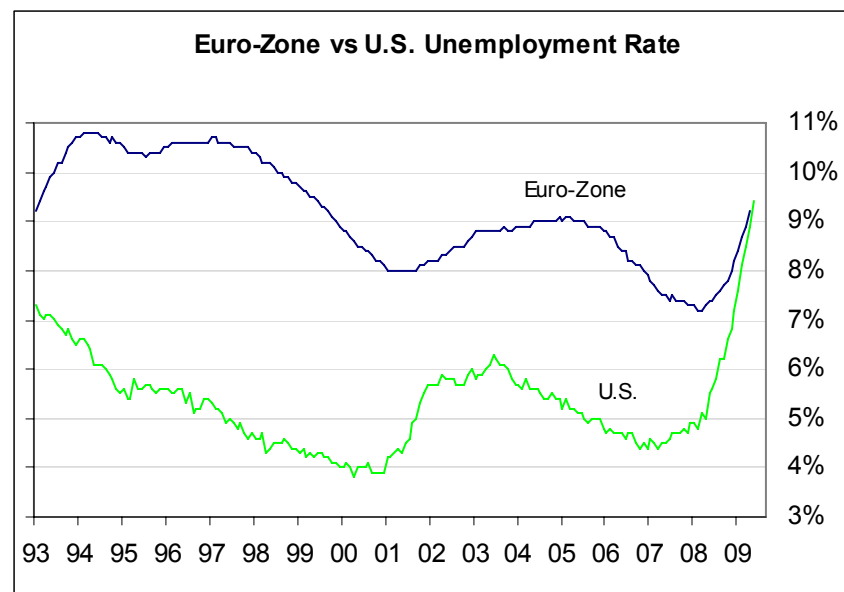
- **2009: +0.3%**
- **2010: +1.0%**



## Euro-Zone Unemployment Rate

**Euro-Zone unemployment rate on average is 3.9 percentage points higher than U.S. due to generous unemployment benefits and structural labor market rigidity.**

**However, U.S. unemployment rate (9.4%) currently exceeds Euro-Zone rate (9.2%)**

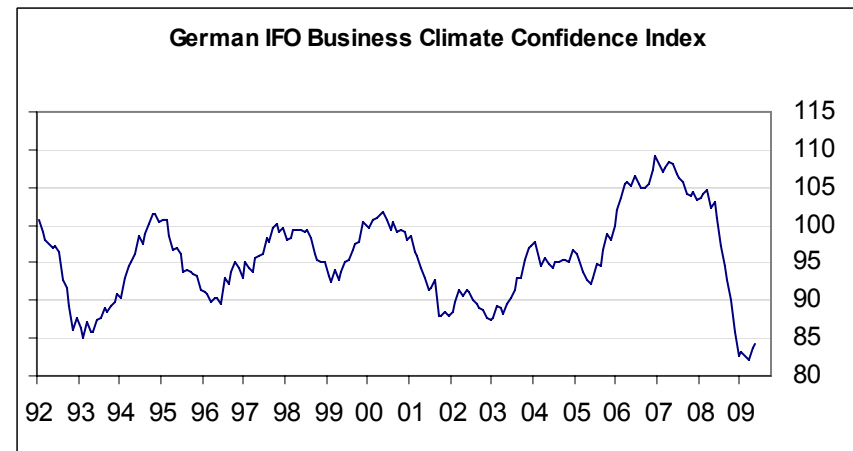
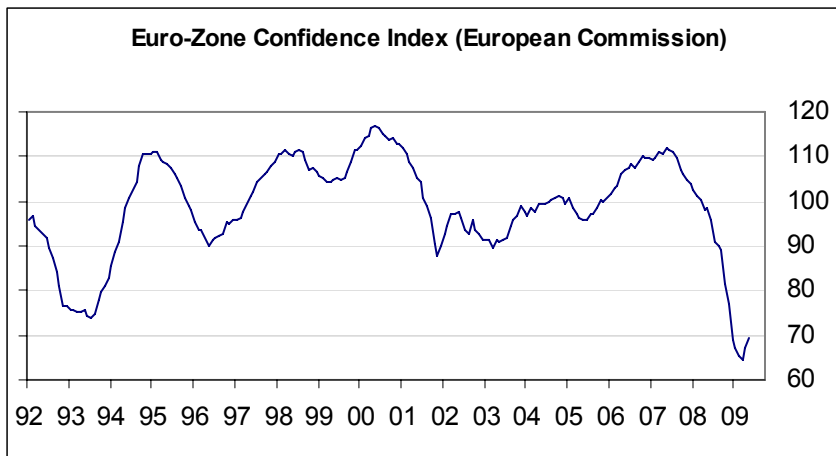
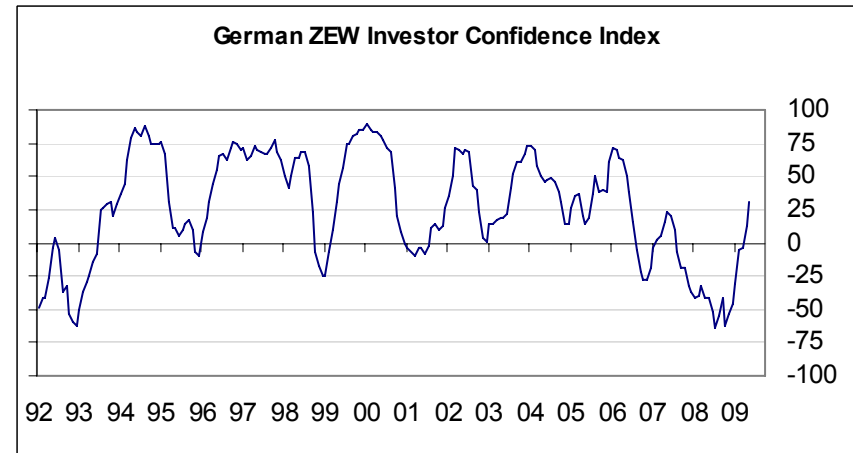


# European Confidence

**IFO – Business climate – survey of 7000 businesses**

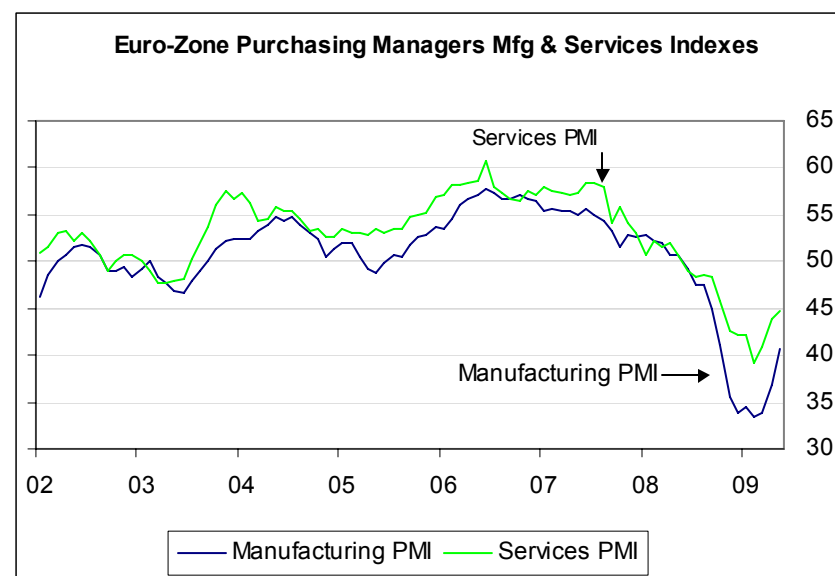
**ZEW – Investment professionals – survey of 350 Institutional Investors & analysts**

**European Commission – Broad survey of consumers and businesses**



## Euro-Zone Purchasing Managers Indexes

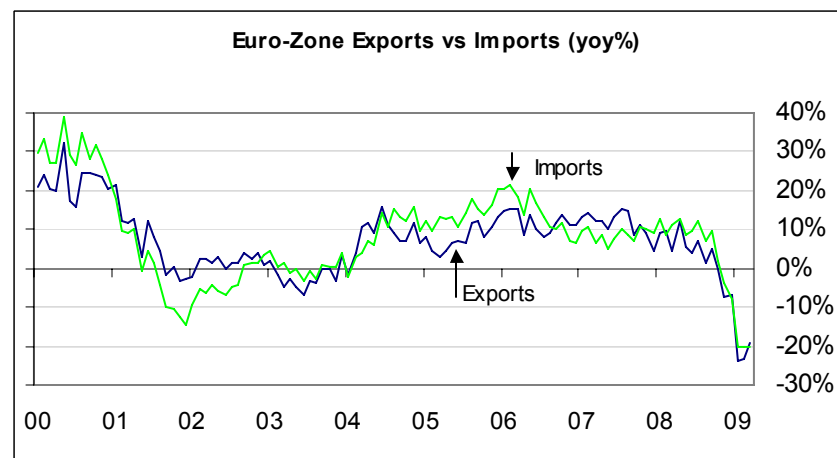
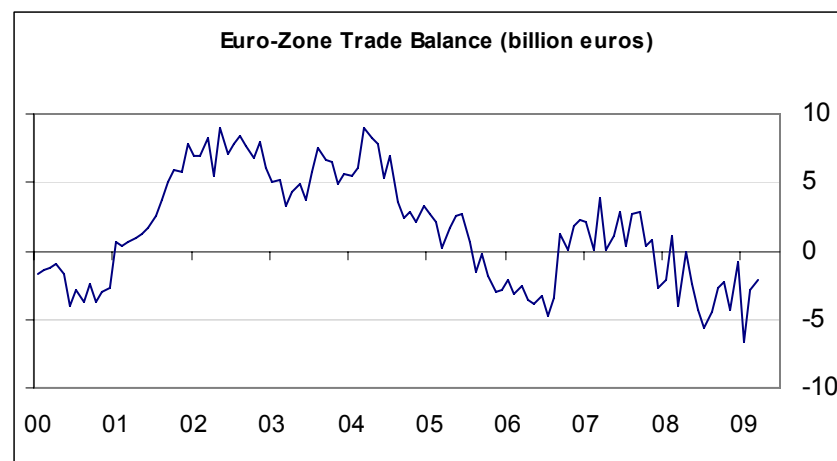
- Survey of purchasing executives in the manufacturing and services sectors
- 50 is the boundary between a contraction/expansion in the sector
- Both indexes have been below 50 since June 2008; indexes hit record lows in February (33.5 for mfg, 39.2 for services), but have since rebounded higher.



## Euro-Zone Trade Balance

- Euro-Zone ran a trade surplus through most of 2001-07; positive for euro
- Trade balance turned to deficit in 2008 as global economic growth sagged and Euro-Zone exports plunged
- Exports are important for Euro-Zone, accounting for about 22% of GDP

**March exports -19.2% y/y;  
March imports -20.1% y/y.**



# **Euro-Zone Interest Rate Markets**

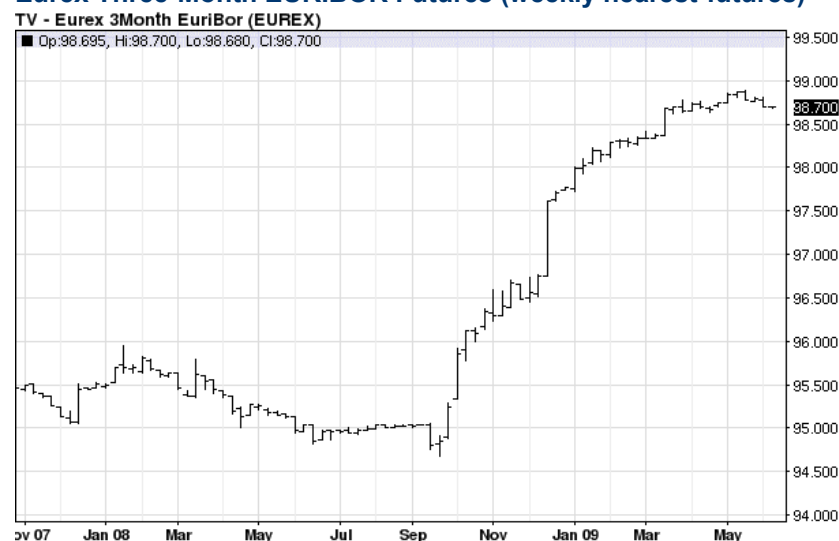
## EUREX Three-Month EURIBOR Futures

EURIBOR Futures prices have rallied sharply on the financial crisis with ECB cutting 2-week refinancing rate by 325 basis points from 4.25% to 1.00%

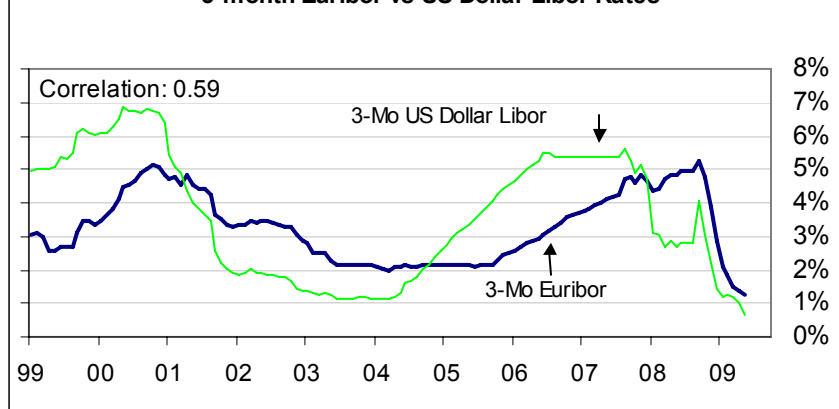
More recently EURIBOR Futures prices have flattened out with prospect of no further ECB easing.

Since 2000 technology bust, U.S. 3-month rates have been leading European rates; Europe has been more stable.

Eurex Three-Month EURIBOR Futures (weekly nearest-futures)



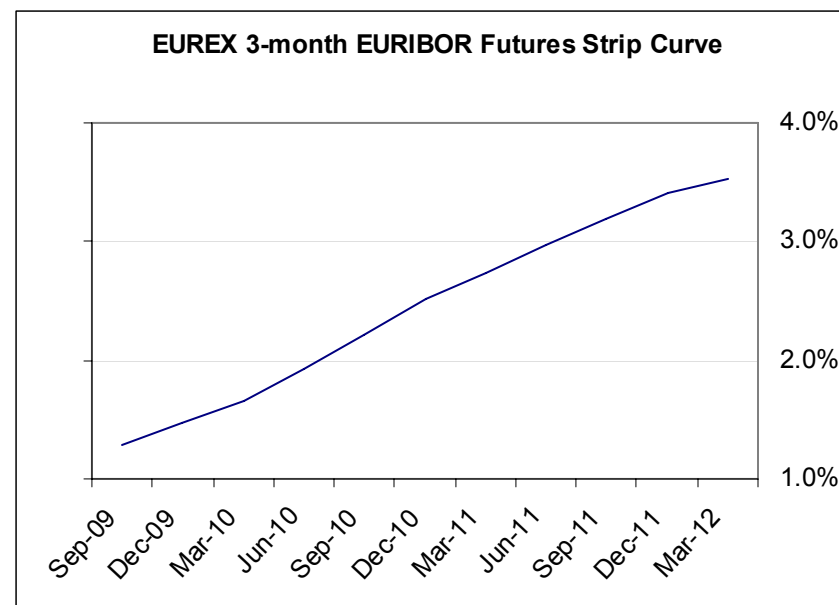
3-month Euribor vs US Dollar Libor Rates



## Three-Month EURIBOR Futures Strip Curve

**Futures strip curve shows expected 3-month EURIBOR rate looking out into the future**

**Curve shows that the market expects the 3-month EURIBOR rate to slowly rise from current level of about 1.25% to 2.00% by Sep-2010 and to 3.50% by Mar-2012 as the business cycle and monetary policy normalize.**



Data as of 10-June-2009

# EUREX Euro-Bund Futures (10-year)

## Key Drivers for Bund Prices

- Inflation expectations
- ECB monetary policy
- Bund auction supply
- External factors (global and U.S. macroeconomics)

Bund prices rallied from June-08 thru March-09 due to the global financial crisis and an easier monetary policy

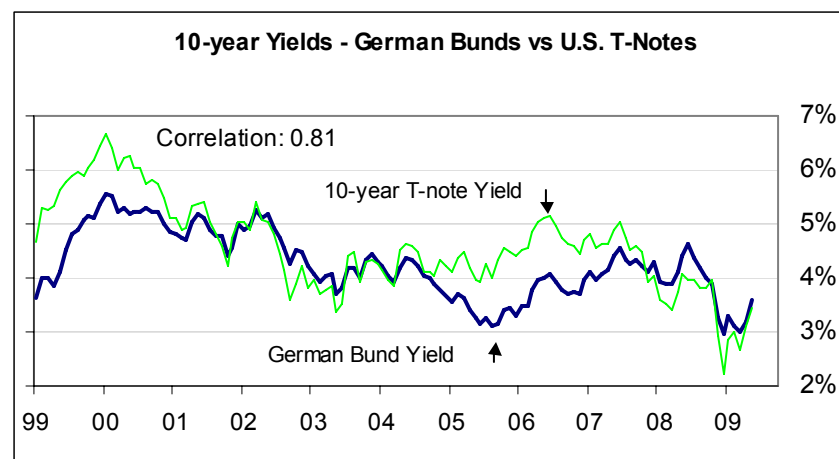
Bund prices since April have fallen due to (1) economic and financial system stabilization, (2) inflation concerns, and (3) larger government bond supply

### Eurex Bund Trading Hours:

8:00-22:00 Central European Time (Germany)

2:00 AM – 4PM Eastern Time (NY)

Eurex Euro-Bund Futures (weekly nearest-futures)



## **Euro-Zone Stock Index Markets**

# Dow Jones EURO STOXX 50® Index

## Stock Component Weights

- 50 blue-chip European companies.
- Market-cap weighted index.
- Covers 51% of DJ STOXX 600 and just under 50% of all free float market cap in European countries represented in the index.
- Index managed by Dow Jones.

### Country Breakdown

France	35.8%
Germany	27.8%
Spain	15.4%
Italy	11.4%
Netherlands	4.8%
Finland	3.4%
Luxembourg	1.4%
Belgium	0.5%

### Sector Breakdown

Financials	29.7%
Utilities	11.8%
Energy	10.9%
Telecom	9.9%
Industrials	8.3%
Consumer Discretionary	6.9%
Consumer Staples	6.1%
Health Care	6.0%
Information Technology	5.4%
Materials	5.0%

Total SA	6.60%	AXA SA	1.81%
Telefonica SA	4.82%	Iberdrola SA	1.73%
Banco Santander SA	4.82%	Vivendi	1.69%
Sanofi-Aventis SA	3.63%	Volkswagen AG	1.68%
E.ON AG	3.60%	Danone	1.53%
Siemens AG	3.37%	Carrefour SA	1.52%
Nokia OYJ	3.36%	Muenchener Rueckversi	1.47%
ENI SpA	3.27%	Assicurazioni Generali S	1.46%
BNP Paribas	3.20%	ArcelorMittal	1.42%
GDF Suez	2.78%	Air Liquide SA	1.34%
Banco Bilbao Vizcaya A	2.51%	Vinci SA	1.33%
Allianz SE	2.45%	ING Groep NV	1.20%
France Telecom SA	2.40%	LVMH Moet Hennessy L	1.19%
Bayer AG	2.33%	Koninklijke Philips Electro	1.05%
BASF SE	2.21%	Schneider Electric SA	1.02%
UniCredit SpA	2.17%	L'Oreal SA	1.02%
SAP AG	2.07%	Repsol YPF SA	1.01%
Deutsche Bank AG	2.07%	Deutsche Boerse AG	0.93%
Unilever NV	2.06%	Credit Agricole SA	0.84%
Societe Generale	1.94%	Cie de Saint-Gobain	0.80%
Daimler AG	1.90%	Telecom Italia SpA	0.78%
RWE AG	1.90%	Alstom SA	0.74%
Intesa Sanpaolo SpA	1.89%	Aegon NV	0.48%
Deutsche Telekom AG	1.86%	Renault SA	0.46%
Enel SpA	1.82%	Fortis	0.45%

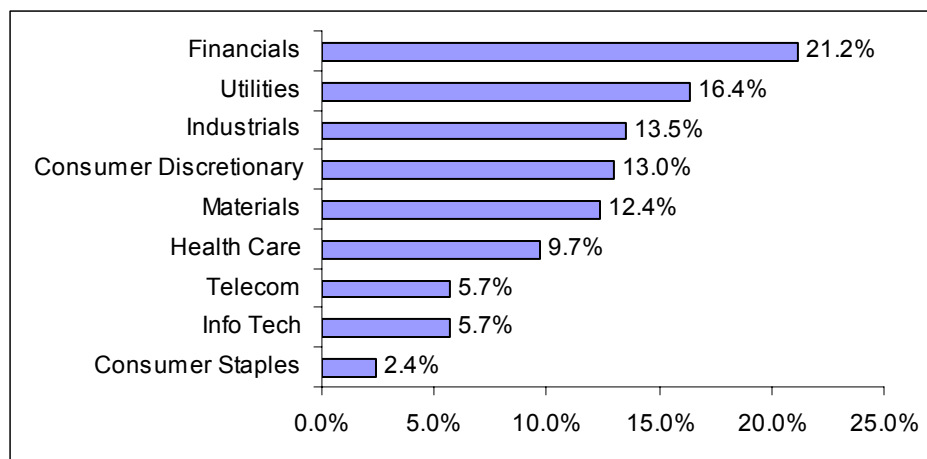
For more info, see [stoxx.com](http://stoxx.com)

Note: weights as of 8-Jun-2009

## German DAX<sup>®</sup> Index

- 30 blue-chip German companies trading on the Deutsche Borse
- Market-cap weighted index with cap of 10% on any particular stock
- Index managed by Deutsche Borse

### Sector Breakdown



For more info on DAX, see [deutsche-boerse.com](http://deutsche-boerse.com)

### Stock component weights

Company	Weight
E.ON AG	10.72%
Siemens AG	9.43%
Allianz SE	7.24%
Bayer AG	6.76%
BASF SE	6.64%
Deutsche Bank AG	5.78%
Deutsche Telekom AG	5.70%
RWE AG	5.68%
SAP AG	5.67%
Daimler AG	5.22%
Volkswagen AG	4.76%
Muenchener Rueckversicherun	4.33%
Deutsche Boerse AG	2.68%
Linde AG	2.26%
Deutsche Post AG	1.98%
Bayerische Motoren Werke	1.91%
K+S AG	1.55%
ThyssenKrupp AG	1.39%
Fresenius Medical Care	1.24%
Adidas AG	1.14%
Deutsche Lufthansa AG	1.07%
MAN SE	1.04%
Merck KGaA	0.95%
Metro AG	0.93%
Henkel AG & Co KGaA	0.87%
Commerzbank AG	0.80%
Fresenius SE	0.72%
Beiersdorf AG	0.63%
Salzgitter AG	0.58%
Hannover Rueckversicherung	0.34%

Note: weights as of 8-Jun-2009

# European Stock Index Performance

## Key Stock Market Drivers

- Earnings expectations (2008 -40%, 2009 +9%, 2010 +22%)
- Interest rates
- Macroeconomic/monetary conditions

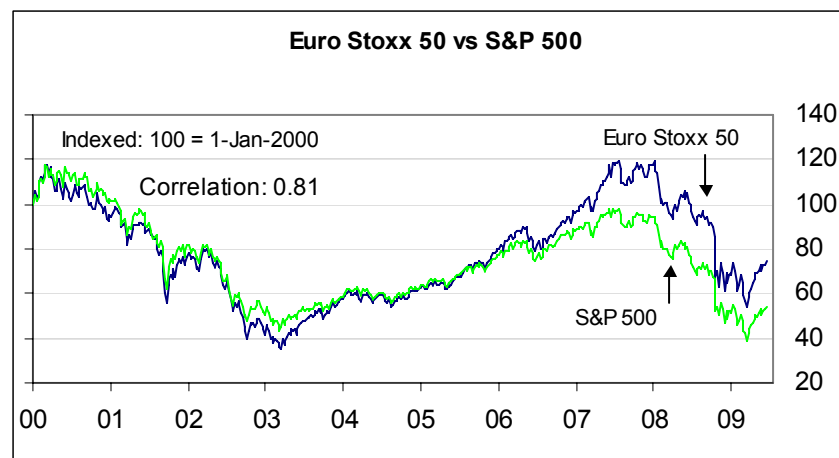
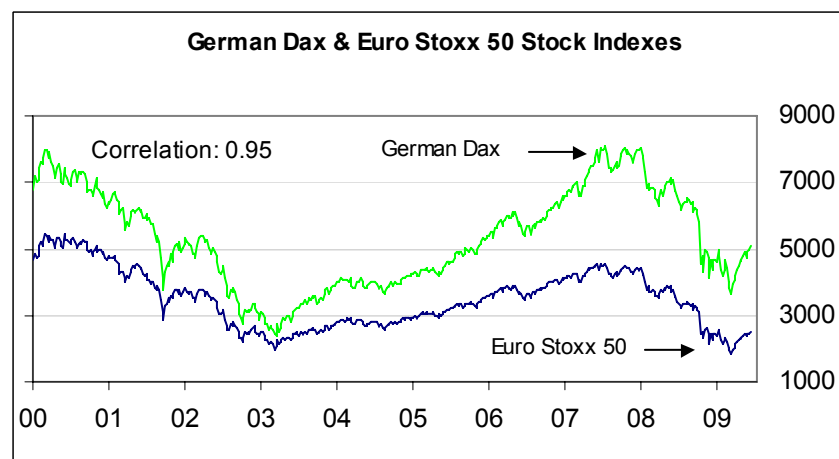
**German DAX has shown more strength than EURO STOXX 50 from 2003 (top chart)**

**EURO STOXX 50 has been stronger than S&P 500 index since 2007; S&P 500 undercut by U.S. housing and financial crises (bottom chart)**

### Eurex Stock Index Trading Hours:

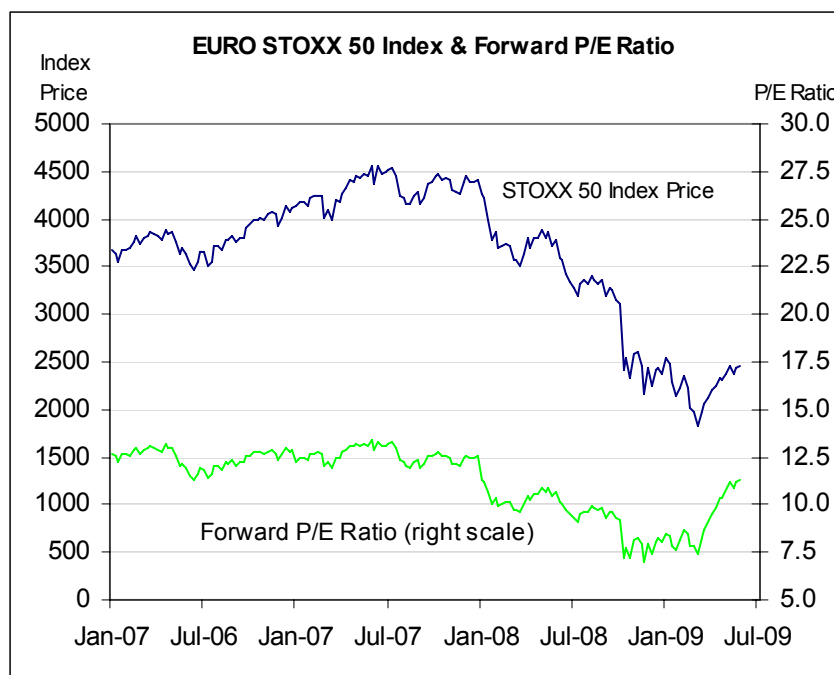
7:30-22:00 Central European Time (Germany)

1:30 AM – 4 PM Eastern Time (NY)



## European Stock Index Valuation

- **Forward Price/Earnings (P/E) ratio, based on year-ahead forecasted earnings, hit a low of 7.25 in early-December 2008 during the financial crisis.**
- **Forward P/E still reasonable near 11.3 even after upward rebound in stock prices.**
- **Valuation still below the 2007 average of about 12.5.**
- **EURO STOXX 50 forward P/E of about 11.3 is well below the U.S. S&P 500's 16.1, indicating that European stocks are more reasonably priced than U.S. stocks**



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