

国际经济学

欧洲货币体系与欧元

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提纲

- 1 Motivation
- 2 From Snake to the EMS
- 3 From EMS to EMU
- 4 the Economics of Euro— Theory of Optimum Currency Area
- 5 the Crisis of EU

1 Motivation

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From Academics to Reality

- 1961 年，经济学家蒙代尔写了一篇论述货币区的论文—A Theory of Optimum Currency Areas，文章提出各国要用一种单一货币或者共同货币来替代某国货币
- 当时，几乎每个国家都是一个独立的货币区，因此蒙德尔也怀疑他研究是否有实际意义，
- 什么是货币区的合适范围，最初这可能纯粹是个学术问题，因为它几乎没有进入各国政治可行性的考虑范围内，即放弃母国货币而采用另外一种安排
- 差不多 40 年之后，就在 1999 年，11 个欧洲国家作出选择，建立这样一个货币区，现在称之为欧元区 (Eurozone)
- 几个月以后，蒙代尔被授予诺贝尔经济学奖
- 此后欧元区，一次次的扩大，现在，有 19 个成员国，有 3 亿人在使用这种货币
- 2008 年金融危机之后，冰岛、希腊、爱尔兰、葡萄牙、西班牙等国相继陷入国债危急中。2009 年 10 月 20 日浮出水面的希腊债务危机为欧元危机正式拉开了序幕。
- 2018 年，意大利出现反欧元的政治力量

Quotation on Euro

让 • 莫内 (欧洲之父)

除了结成联盟以外，欧洲人没有未来，

《马斯特里赫特条约》(欧盟条约)，1992 年，第一编，第 A 条，

在创建一个欧洲各国人民之间空前紧密的联盟的进程中，本条约标志着一个新的阶段，期间的所有决策都尽可能贴近民意

米尔顿 • 弗里德曼，诺贝尔经济学奖得主，1997 年，

政治统一可以为货币统一铺平道路，在不利的条件下强制实施的货币统一，必定会成为达到政治统一的障碍

欧元危机: 共同货币阴影下的欧洲

- 尽管被它的设计者誉为一个能够令欧洲团结并繁荣的杠杆工具，但欧元实行的效果却大相径庭
- 在不同的国家中使用共同货币，致使欧元从诞生之日起就先天缺陷
- 经济一体化的速度超过了政治一体化的速度，直接导致了欧洲经济停滞，前景黯淡
- 那么，接下来的问题就是：欧元还有挽救的机会吗？
 - 对欧元区结构以及对欧元区成员国施加的政策进行彻底改革
 - 对单一货币的欧元试验进行妥善终止
 - 或者构建一个大胆的崭新体系，即“灵活欧元”



Who are in EU zone?

- EU-Eurozone (19): Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain, Lithuania2014, Latvia2015.
- EU-ERM (1): Denmark.
- EU-Other (7): Bulgaria, Czech Republic, Hungary, Poland, Romania, Sweden, Croatia
- Candidates (4): United Kingdom, Iceland, Macedonia, Turkey.



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The Snake of in the Tunnel

- 1972-1979, The Snake system in the Tunnel— mini-Bretton Woods
- 1972-1976 the 'worm inside the Snake' !
- After 1973, the plain 'Snake' .
- The Snake system had a chequered history

Central parity realignments in the Snake

Currency	Mar 1973	Jun 1973	Sep 1973	Nov 1973	Oct 1976	Apr 1977	Aug 1977	Feb 1978	Oct 1978
Belg./Lux. franc					-2.0				+2.0
Deutschmark	+3.0	+5.5							+4.0
Dutch guilder			+5.0		-2.0				+2.0
Swedish krone					-3.0	-6.0			
Danish krone					-6.0	-3.0	-5.0		
Norwegian krone				+5.0	-3.0	-3.0	-5.0	-8.0	

(+) indicates a revaluation; (-) indicates a devaluation.

Source: European Commission.

the Background of EMS

- On 17 June 1978, at a conference held in Bremen, six of the community countries committed themselves to the setting-up of the EMS to replace the Snake.
- The EMS commenced operation on 13 March 1979 and, despite much initial scepticism about its survival chances, operated with mixed success for two decades.
- The EMS consisted of three main features:
 - 1 the Exchange Rate Mechanism (ERM);
 - 2 the European Currency Unit (ECU)
 - 3 financing facilities. A proposed European

The Features of ERM 欧洲货币体系

- A grid of bilateral exchange rate bands between each of the member currencies 2.25–6–15
- An individual band of fluctuation (threshold) for each currency against the ECU
- which authority was responsible for intervention when a bilateral margin was reached?

	DEM 1=	BEF/LUF 100=	ESP 100=	FRF 1=	IEP 1=	ITL 1000=	NLG 1=	ATS 1=	PTE 100=
BEF/LUF	20.6255								
ESP	85.0722	412.462							
FRF	3.35386	16.2608	3.94237						
IEP	0.402676	1.95232	0.473335	0.120063					
ITL	990.2	4799.90	1163.72	295.183	2458.56				
NLG	1.12674	5.46285	1.32445	0.335953	2.79812	1.13812			
ATS	7.03552	34.1108	8.27006	2.09774	17.4719	7.10657	6.24415		
PTE	102.505	496.984	120.492	30.5634	254.560	103.541	90.9753	14.5697	
FIM	3.04001	14.7391	3.57345	0.90642	7.54951	3.07071	2.69806	0.432094	2.96571

The ECU and its Role as an indicators of Divergence

- The ECU 埃居 was an artificial currency based upon a calculation of a weighted basket of 12 European currencies.
- The ECU was nothing more than a calculation of how a currency was doing against a basket of other European currencies.



FINANCING FACILITIES

- each member of the EMS deposited 20% of its gold dollar reserves with the EMCF in exchange for the equivalent value in ECUs
- Administrative Organization Evolution
1973 欧洲货币合作基金 (European Monetary Cooperation Fund (EMCF)) ⇒ 1994 欧洲货币管理局 (European Monetary Institute) ⇒ 1998 欧洲中央银行 (European System of Central Banks (ESCB))
- credit facilities
 - Very short-term financing —45days
 - Short-term monetary support—3 months
 - Medium-term financial assistance—2-5 years

Assessment of the EMS

1 as a zone of currency stability

- some critics of the system viewed it as a ‘mere crawling peg’
- Despite these periodic crises, authors such as Artis and Taylor (1988, 1994) have shown that both nominal exchange rates and real effective exchange rates had become less volatile for EMS currencies (kroner, Belgian franc, lira, guilder and Deutschmark) than for non-EMS currencies (the pound, dollar and yen) since 1979 compared with the first six years of floating.
- countries derived both greater domestic and external financial stability from membership of the ERM

2 as an anti-inflation zone

- Germany has good reputation in fighting inflation, Why? 历史的惨痛教训
- two ways that the fight against inflation was assisted by full EMS membership:
 - 1 by giving the authorities an incentive to bring inflation under control
 - 2 by affecting private agents’ wage and price behaviour.
- no proof of the EMS anti-inflation hypothesis

Inflation in ERM and non-ERM countries

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
ERM countries																			
Belgium	6.7	7.1	8.7	7.7	6.3	4.9	1.3	1.6	1.2	3.1	3.4	4.2	2.2	2.5	2.4	1.3	1.8	1.5	0.9
Denmark	12.3	11.7	10.1	6.9	6.3	4.7	3.7	4.0	4.5	4.8	2.6	2.4	2.1	1.3	2.0	2.1	2.1	2.2	1.8
France	13.6	13.4	11.8	9.6	7.4	5.8	2.7	3.1	2.7	3.6	3.4	3.4	2.5	2.2	1.7	1.8	2.1	1.3	0.7
Italy	21.2	19.3	16.4	14.9	10.6	8.6	6.1	4.6	5.0	6.6	6.1	6.2	5.0	4.5	4.2	5.4	4.0	1.9	2.0
Netherlands	6.5	6.7	5.9	2.7	3.3	2.3	0.1	-0.7	0.7	1.1	2.5	3.2	2.8	1.6	2.1	1.4	1.4	1.9	1.8
Germany	5.4	6.3	5.2	3.3	2.4	2.1	-0.1	0.2	1.3	2.8	2.7	4.1	5.1	4.4	2.7	1.7	1.2	1.5	0.6
Average ERM	10.1	10.8	9.7	7.5	6.1	4.7	2.3	2.1	2.6	3.7	3.5	3.9	3.3	2.8	2.5	2.3	2.1	1.7	1.3
Non-ERM countries																			
Austria	6.3	6.8	5.4	3.3	5.7	3.2	1.7	1.4	1.9	2.6	3.3	3.1	3.4	3.2	2.7	1.6	1.8	1.2	0.8
Canada	10.2	12.4	10.8	5.8	4.3	4.0	4.2	4.4	4.0	5.0	4.8	5.6	1.5	1.9	0.2	2.2	1.6	1.6	1.0
Japan	7.8	4.9	2.7	1.9	2.3	2.0	0.6	0.1	0.7	2.3	3.1	3.2	1.7	1.3	0.7	-0.1	0.1	1.7	0.7
Norway	10.9	13.7	11.3	8.4	6.3	5.7	7.2	8.7	6.7	4.6	4.1	3.4	2.3	2.3	1.4	2.4	1.2	2.6	2.3
United Kingdom	18.0	11.9	8.6	4.6	5.0	6.1	3.4	4.1	4.9	7.8	9.5	7.5	4.2	2.5	2.0	2.7	2.5	1.8	1.6
United States	13.5	10.3	6.1	3.2	4.3	3.5	1.9	3.7	4.1	4.8	5.4	4.2	3.0	3.0	2.6	2.8	2.9	2.3	1.5
Average non-ERM	11.1	10.0	7.5	4.5	4.7	4.1	3.2	3.7	3.7	4.5	5.0	4.5	2.7	2.4	1.1	1.9	1.7	1.9	1.3

The Economic Performance of ERM and non-ERM Countries

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
ERM countries																			
Belgium	2.9	-0.3	1.1	2.0	1.4	2.5	1.2	1.7	4.1	3.8	4.2	1.8	1.3	-0.7	3.3	2.3	0.8	3.8	2.1
Denmark	-0.4	-0.9	3.0	2.5	4.4	4.3	3.6	0.3	1.2	0.6	1.4	1.1	0.6	0	5.5	2.8	2.5	3.0	2.5
France	1.6	1.2	2.5	0.7	1.3	1.9	2.5	2.3	4.5	4.3	2.5	1.0	1.3	-0.9	1.9	1.8	1.0	1.9	3.6
Italy	3.5	0.5	0.5	1.2	2.6	2.8	2.8	3.1	3.9	2.9	2.2	1.4	0.7	-0.9	2.3	3.0	1.0	2.0	1.7
Netherlands	1.2	-0.5	-1.2	1.7	3.3	3.1	2.8	1.4	2.6	4.7	4.1	2.4	1.5	0.7	2.9	3.0	3.0	3.8	4.3
Germany	1.0	1.0	-0.9	1.8	2.8	2.0	2.3	1.5	3.7	3.6	5.7	5.1	1.8	-1.1	2.4	1.8	0.8	1.5	1.7
Average ERM	1.6	0	0.8	1.7	2.6	2.8	2.5	1.7	3.3	3.3	3.4	2.1	1.2	-0.5	3.1	2.5	1.5	2.7	2.7
Non-ERM countries																			
Austria	2.9	-0.3	1.1	2.0	1.4	2.5	1.2	1.7	4.1	3.8	4.2	3.6	2.4	0.3	2.7	1.9	2.6	1.8	3.6
Canada	1.5	3.7	-3.2	3.2	6.3	4.8	3.3	4.2	5.0	2.4	-0.2	-2.1	0.9	2.3	4.8	2.8	1.6	4.2	4.1
Japan	2.8	3.2	3.1	2.3	3.9	4.4	2.9	4.2	6.2	4.8	5.1	3.4	1.0	0.2	1.1	1.9	3.4	1.9	-1.1
Norway	4.2	0.9	0.3	4.6	5.7	5.3	4.2	2.0	-0.5	0.9	1.9	3.6	3.3	2.7	5.3	4.4	5.3	5.2	2.6
United Kingdom	-2.2	-1.3	1.7	3.7	2.4	3.5	4.4	4.8	5.0	2.2	0.4	-1.4	0.2	2.3	4.4	2.9	2.8	3.3	3.1
United States	-0.3	2.5	-2.1	4.0	6.8	3.7	3.0	2.9	3.8	3.4	1.3	-0.2	3.3	2.7	4.0	2.5	3.7	4.5	4.2
Average non-ERM	1.5	1.5	0.2	3.3	4.4	4.0	3.2	3.3	3.9	2.9	2.1	1.2	1.9	1.8	3.7	2.7	3.2	3.5	2.8

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What is EMU 经济与货币联盟

- two main components to EMU
 - 1 an exchange rate union
 - 2 complete capital market integration
- the difference between Monetary Unit and Fixed Exchange rate regime
 - 1 permanent commitment to fixed exchange rate
 - 2 well-developed institutional framework
 - 3 capital flow freely

The Road to EMU in Europe

- 1957, The Treaty of Rome
- 1969, Hague Summit
- 1972, The Werner Report
- 1989, the Delors Report
- Stage 1: the convergence phase(1990.7.1-1993.12.31)
- Stage 2: the transition phase(1994.1.1-)
- Stage 3: the fixing and euro phase(1997.1.1-1999.1.1)

The Maastricht Treaty 马斯特里赫特条约

- As a follow-up to the Delors Report, the Maastricht Treaty was signed in the Dutch town of Maastricht in December 1991
- The qualification to join EMU
 - 1 Average consumer price inflation in the country should not be more than 1.5% above that of the three countries with the lowest inflation rates;
 - 2 A country should not have an excessive budget deficit, with the reference rate being that it should not exceed 3% of GDP;
 - 3 The outstanding public-sector debt (national debt) of the country should not exceed 60% of GDP;
 - 4 Average nominal long-term interest rates in the year of examination should not be more than 2% above that of the three countries with the lowest inflation rates
- two big letout clauses
- Special cases for United Kingdom, Denmark and Sweden.

Evaluation of the Maastricht Criteria

- The Maastricht criteria were primarily motivated by a German desire to ensure that the qualifying members for EMU had a strong fiscal and monetary background.
- Criticism 1: arbitrary both in relation to the targets set and the targets chosen
- Criticism 2: the national debt criterion was not really appropriate since it looked only on the liability side, ignoring state-owned assets.
- Criticism 3: 与被排除在 EMU 外相比，高负债国将更容易满足，成为 EMU 有成员所要求的马斯特里赫特条件。而他们的加入会损害 EMU 的整体利益
- Criticism 4: the convergence criteria are not really necessary because of so-called 'no-bail-out' clause(不救助条款)
- Criticism 5: there were plenty of 'before' conditions but no 'after' conditions
如何杜绝加入之后在犯错问题？

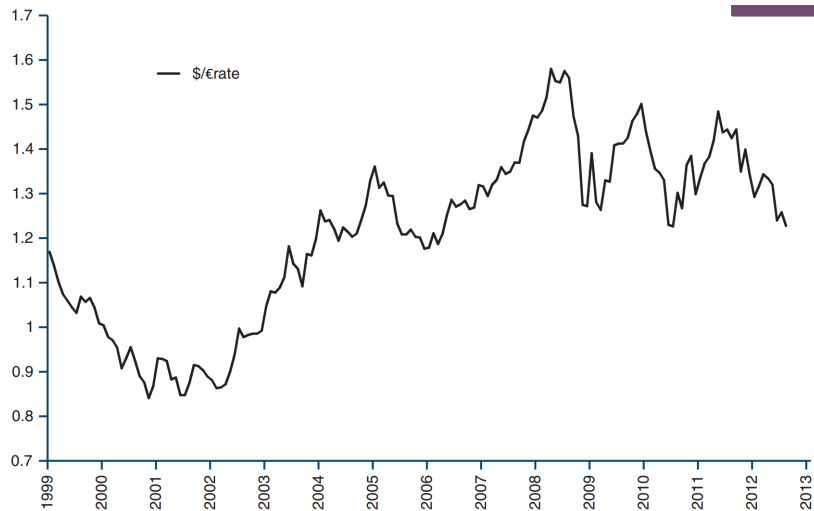
The Stability and Growth Pact 稳定与增长公约

- At a summit held in Dublin in December 1996, the Germans secured the SGP.
- The purpose is to ensure that fiscal prudence remained in place following the start of EMU
- The pact subjects countries running ‘excessive’ fiscal deficits (defined as a deficit above 3% of GDP) to fines unless they take action to get their deficits down
- There are exceptions: if the member state has suffered a sharp economic downturn, defined as an annual fall of real GDP of 2%

The Changeover to the Single Currency

- Stage1 (scheduled for May 1998) : the selection of the countries that met the Maastricht criteria and were therefore eligible to join EMU(11 counties are selected)
- Stage2 (1 January 1999): the permanent fixing of the bilateral rates between the member currencies and announcement of their conversion rates to the euro.
- State3(starting on 1 January 2002): introduction of euro banknotes and coins

The Performance of the EURO in the Forgein Exchange Market



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Question: 是否应该加入一个最优货币区？做这个决策应该考虑哪些问题？

■ 主要标准

- Market Integration and Efficiency Benefits
- Economic Symmetry and Stability Costs

■ 其他标准

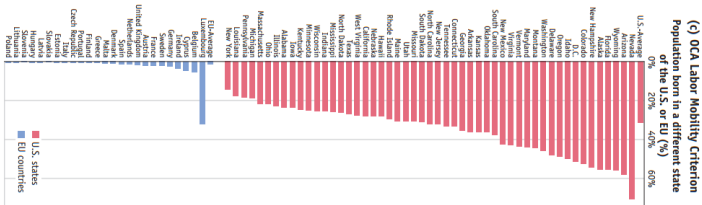
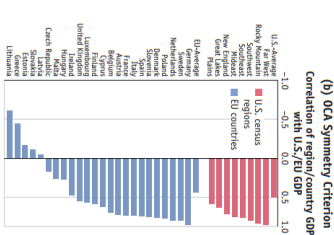
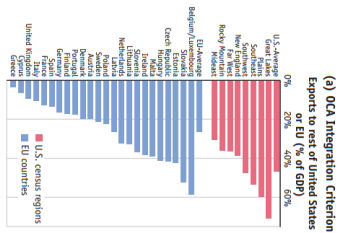
- Labor Market Integration 劳动力市场一体化
- Fiscal Transfers 财政转移支付（财政联邦主义）
- Monetary Policy and Nominal Anchoring 货币政策和名义锚
- Political Objectives 政治目标

鲁晓东

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OCA Criteria for Europe and the United States 比较研究



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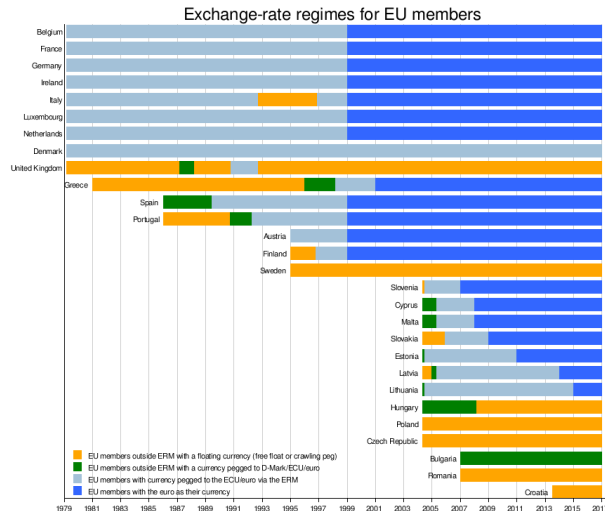
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the Eurosystem

- When the ERM I ceased to exist on 1 January 1999, ERM II(欧元预科班) came into being principally
- ERM II has four key features
 - 1 it is based on central rates fixed for participating currencies vis-à-vis the euro; no parity grid; the normal band of fluctuation being $\pm 15\%$
 - 2 there exist obligatory interventions once margins are met;
 - 3 the ECB and all participating 'pre-in' central banks have the right to initiate procedures to review the central rates
 - 4 access is provided to short-term financing facilities with the ECB having the right to suspend intervention and financing operations.

an Overview of the EuroSystem

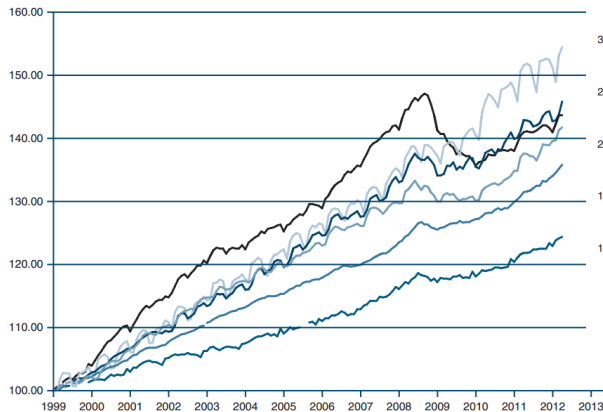


PIIGS and the Eurozone Crisis

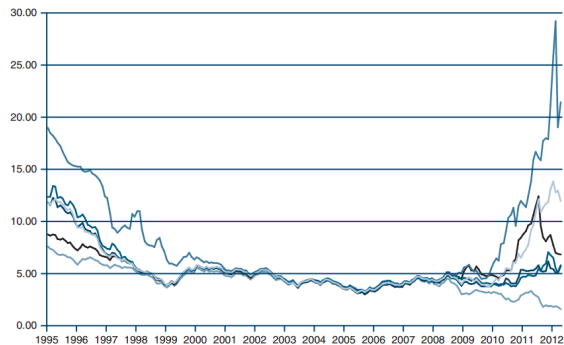
- To maintain their competitiveness vis-à-vis Germany countries like Portugal, Ireland, Italy, Greece and Spain (PIIGS) would need to keep their inflation rates in line with Germany
- That is not the case
- This loss of competitiveness over time which made them vulnerable
- While UIP implies that very short-term interest rates will be equal in a monetary union
- the member countries cannot unilaterally print money to redeem their debt.
- As such, investors have to factor in the possibility that a country that has issued bonds may default on its obligations.
- once the credit crunch got under way, PIIGS debt are given up and attacked
- Greece—Ireland—Portugal—Ireland—Spain

Credit Crisis

Germany Ireland Greece Spain Italy Portugal



Germany Ireland Greece Spain Italy Portugal



The bailouts of PIIGS

- 不是有“不救助条款”(no bailout clause)吗？为什么要救？
- the other measures to save them
 - 资产担保债券购买计划 Covered Bond Purchase Programme(CBPP)
 - 证券市场项目 Securities Market Programme (SMP)
 - 长期再融资操作 Long Term Refinancing Operation (LTRO)
 - 2012 年，签订《财政稳定条约》(Fiscal Stability Treaty)
 - 欧洲稳定机制 European Stability Mechanism
 - 直接货币交易计划 Outright Monetary Transactions (OMTs)

Proposals to resolve the european debt crisis

- 结构化改革 Structural reform
- 债务减免/重组 Debt forgiveness/restructuring
- 发行共同欧元债券 The issuance of common E-bonds (eurobonds)
- 允许欧洲央行印欧元来担保债务偿还 Allow the ECB to print euros to guarantee debt repayment
- 银行联盟 A Banking Union

Openning Question

What's your opinoion on the outlook of Euro ?