



The effects of EMU on structural reforms in labour and product markets

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Outline

- Arguments why EMU might influence structural reform
- Descriptive evidence: structural reform patterns across countries over the past decade
- Regression results: probit estimates linking structural reform to, *inter alia*, exchange rate regimes
→ differences with other, broader OECD work presented earlier: came before, econometric approach differs, focus on major reforms
- Conclusions



Arguments why EMU might influence structural reform intensity

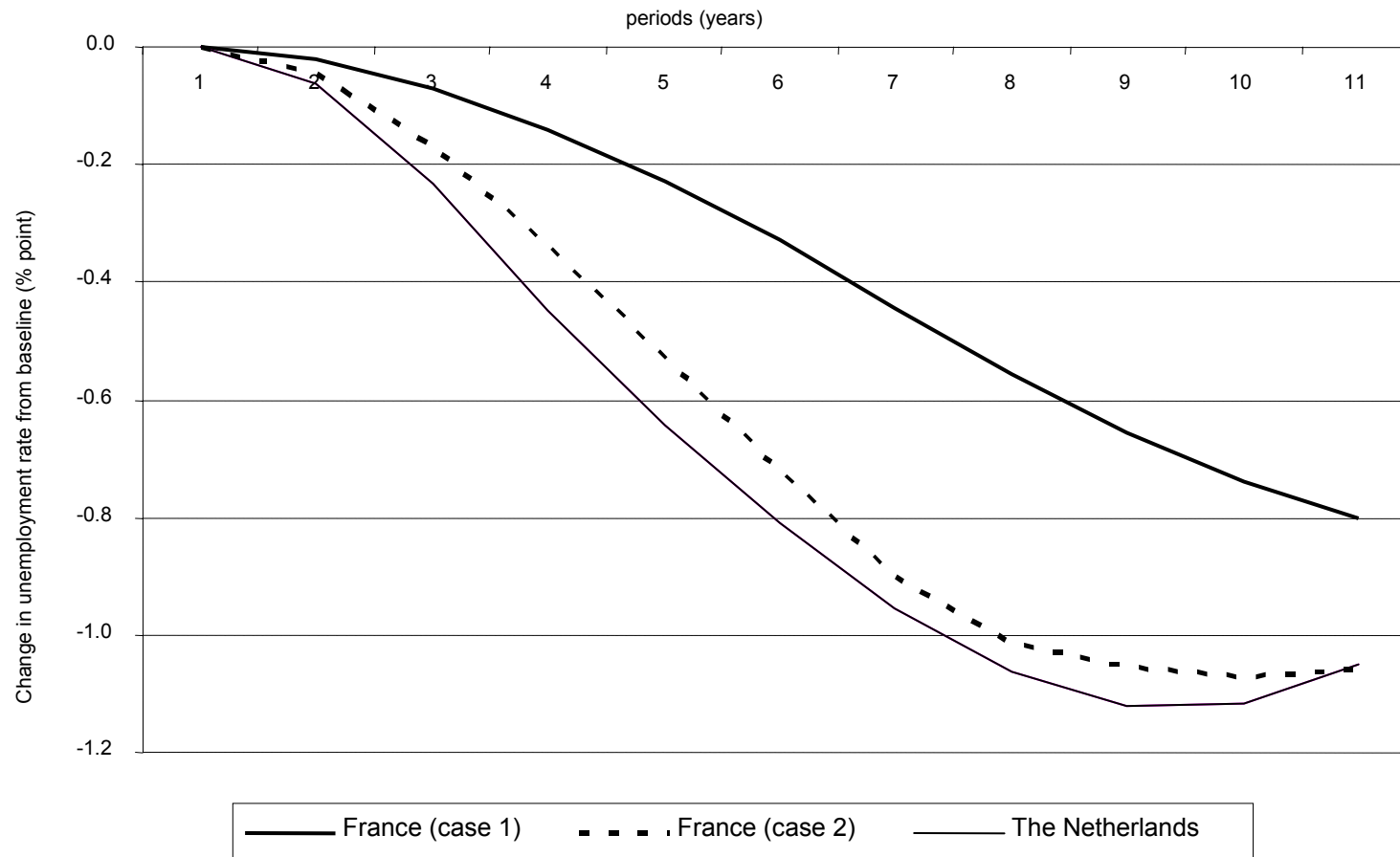
Selected arguments why EMU may strengthen structural reform

- TINA
- Greater price transparency -> greater visibility of the costs of structural rigidities
- Greater product market competition -> less rent -> less defence of rent-capturing institutions
- Greater mobility of capital -> more competition between countries to attract capital inflows

Selected arguments why EMU may weaken structural reform

- Gains from reforms in terms of reducing risk premia in interest rates may be smaller under EMU
- Gains from reform in terms of reducing inflation bias may be smaller under EMU
- Without lower interest rates / depreciation it may take longer to crowd-in the added supply capacity
 - Applies in particular to large countries

Simulated unemployment adjustment in the wake of a drop in the NAIRU




The crowding-in argument needs qualification

- Demand may respond autonomously to added supply, with no need for lower interest rates / depreciation
 - Effect likely to depend on the nature of structural reform
- Fiscal policy could do (some of) the accommodation

What does the empirical literature say?

- Very little and not very consistent
- Reflecting
 - the recent nature of EMU
 - the difficulty of controlling for expectations of EMU
 - and limited systematic information on structural reform

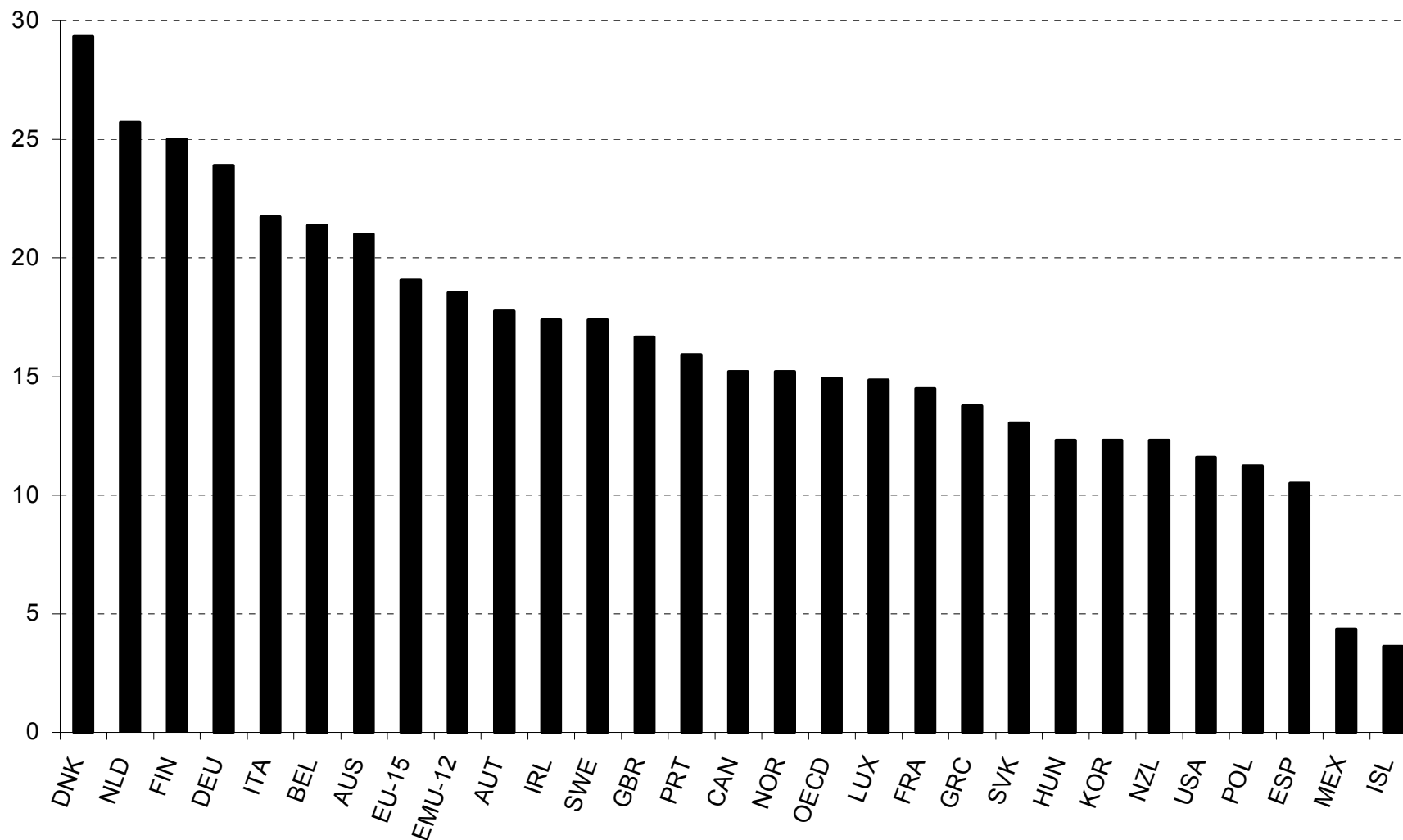


**Descriptive evidence:
structural reform patterns across
countries over the past decade**

Methodology for measuring labour market reform

- Recent labour market reforms (1994-2004) evaluated for 44 individual policy categories
- Scores are assigned to each individual policy measure reflecting its concordance with the OECD Jobs Strategy
- Results are then aggregated up to 7 broad policy areas:
 - ALMPs, taxes, EPL, Unemployment benefit systems, wage formation, working-time flexibility, retirement schemes
- For each policy area, and for labour market reform overall, reform intensity is defined as
$$\frac{\sum \text{scores in sub-categories}}{\sum \text{maximum possible scores}}$$
- Caveats
 - quantification of reforms in individual policy categories
 - Aggregation to policy areas / labour market reform overall

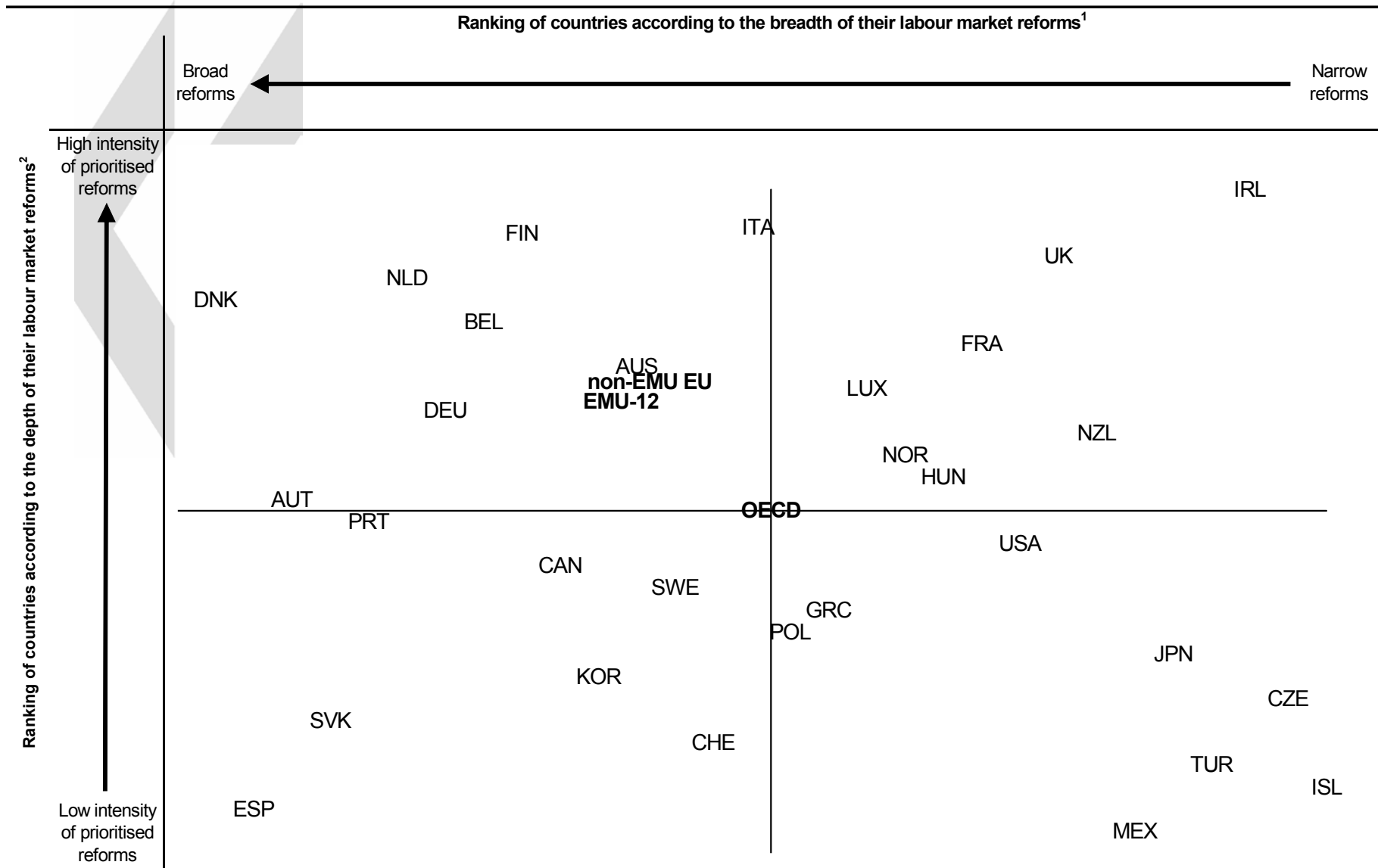
Overall intensity of labour market reforms in individual OECD countries, 1994-2004 (in percent of total maximum possible score)



Main stylised facts

- Average reform intensity over 1994-2004 was greater in the euro area than in the rest of the OECD
- Reforms have been both deeper and more comprehensive in the euro area than in the OECD at large.

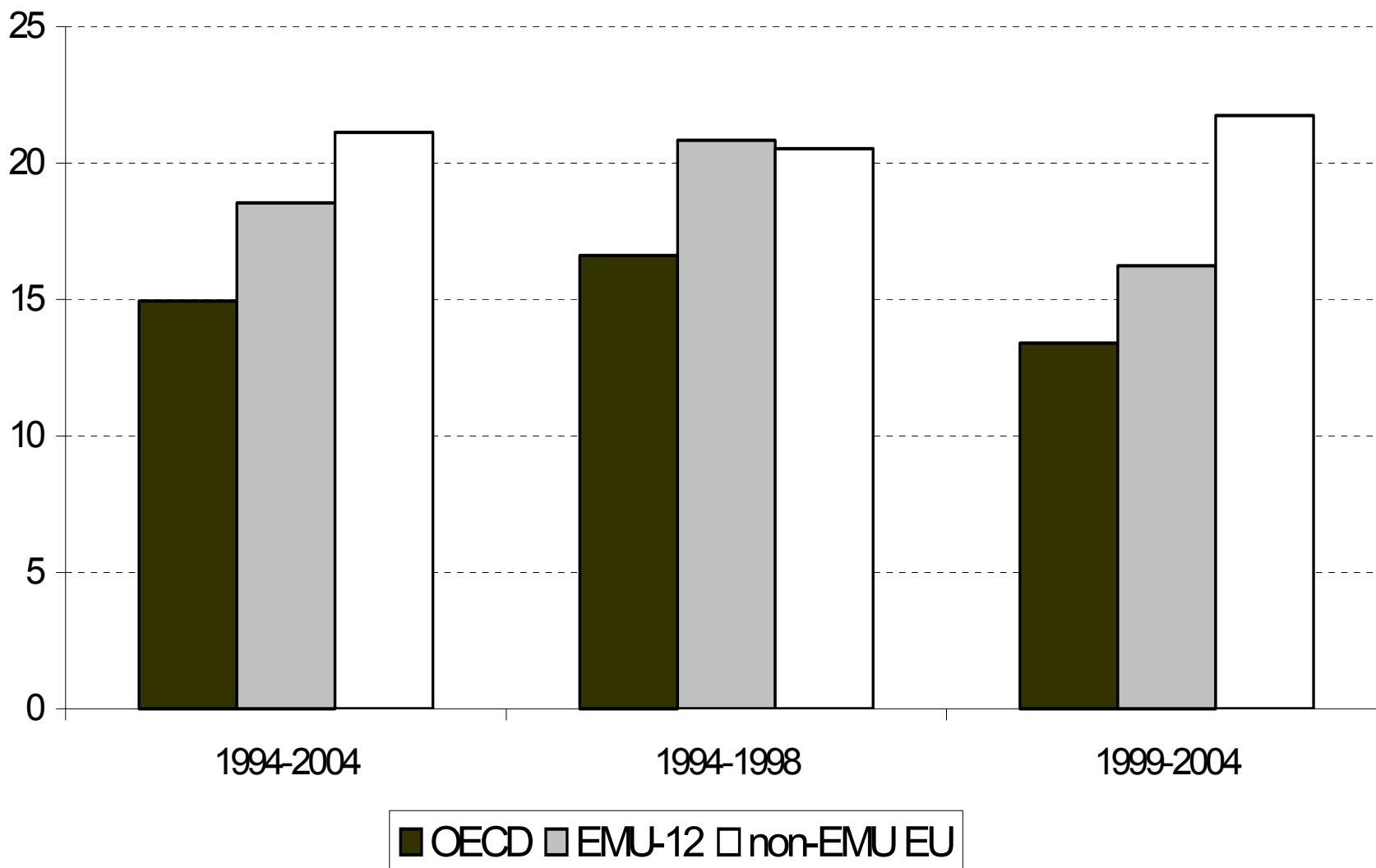
Depth and breadth of labour market reforms



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- Reforms have been deeper and more comprehensive in the euro area
- But
 - Reform intensity was no greater in EMU than in non-EMU EU countries (Denmark, Sweden, United Kingdom)
 - Reform intensity decelerated post-EMU but remained constant in non-EMU EU (and in other OECD)

Timing of recent labour market reforms in EU, EMU and OECD countries

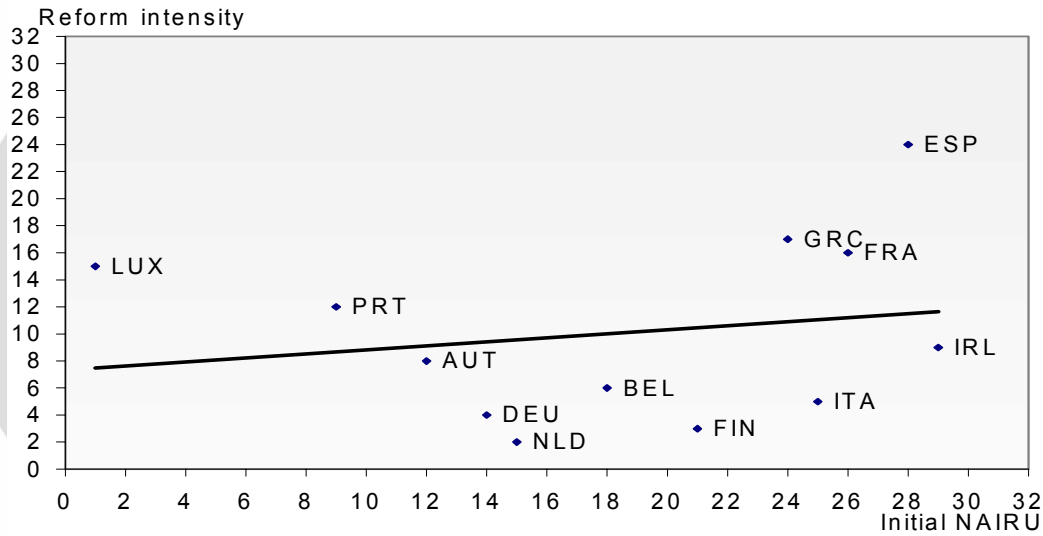


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 - Reform patterns were unresponsive to needs for reform

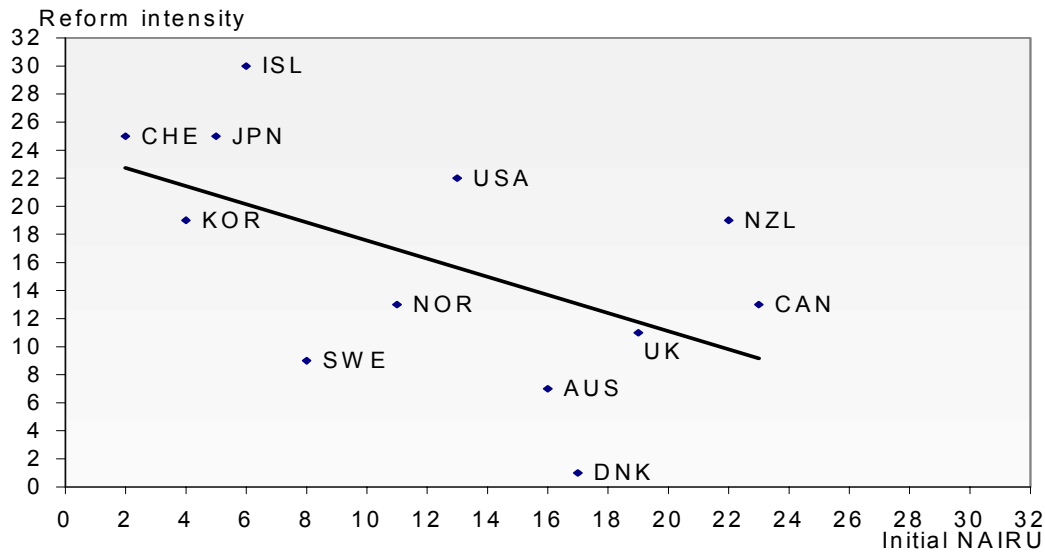
Initial conditions and intensity of labour market reforms over 1994-2004

Ranks of initial NAIURs and ranks of reform intensities: EMU countries



(Spearman's rank) correlation coefficient: 0.19

Ranks of initial NAIURs and ranks of reform intensities: non-EMU countries



(Spearman's rank) correlation coefficient: -0.55 *

Progress in product market reform

- ... was greater in euro area countries than in OECD at large
- ...but was about the same as in non-EMU EU countries despite a much stricter initial stance
- ...however, past regulatory reform and EMU should boost product market competition
- ...resulting in lower rents
- ...and, possibly, less defence of certain rent-extracting labour market institutions



Regression analysis

Econometric analysis...

- ...to identify the effects of EMU is difficult because EMU is recent; it was anticipated; and difficult to distinguish from EU liberalisation process
- ...therefore the focus is different: the effect of monetary policy autonomy on the propensity to reform
 - Advantage: provides enough data across time and countries
 - Drawback: EMU is different from a fixed exchange rate regime
 - The reversibility of a fixed exchange rate regime may not have given as much incentive to reform as EMU
 - But risk of speculative attacks may have given more incentive

Data

- Still focus on labour and product market reform
- But coverage narrowed to 5 policy areas where long time series of indicators are available (tax wedge, unemployment benefits, EPL, retirement incentives, product market regulation)
- Focus on major reforms (# previous section and other OECD work presented earlier)
 - In each area, a major reform is identified by a change in the policy indicator by more than 2σ of the average annual change in the sample. The reform indicator for that area then takes the value 1 (otherwise 0).
 - Provides a plausible pattern across countries (~pattern discussed in descriptive analysis)

Methodology

- Probit estimates, 21 OECD countries, 1985-2003, where dependent variable is the probability to carry out a major reform
- The 5 reform policy indicators can be used in two ways:
 - merged so as to obtain an aggregate reform indicator
 - stacked up to exploit more information

Key explanatory variables

- The autonomy of monetary policy: dummy taking value 1 when the country is not engaged in a fixed exchange rate arrangement
 - Caveat: ignores that degree of commitment to fixed exchange rate arrangements can vary across arrangements and countries
- Control variables
 - Macroeconomic situation: unemployment rate, crisis situation
 - Trade openness: small open economy dummy
 - State of public finances: level of and change in the fiscal balance
 - Political context: general election years
 - Reforms undertaken in other fields (in some specifications)

Probit estimates of the determinants of structural reforms over 1985-2003: pooled data

	(1)	(2)	(3)
Unemployment (-3)	0.02 [2.77]***	0.03 [2.97]***	0.03 [3.27]***
Crisis (-1)	0.39 [3.29]***	0.38 [3.15]***	0.37 [3.01]***
Small country	0.25 [4.19]***	0.27 [4.46]***	0.41 [4.41]***
Fiscal surplus (-1)	0.02 [3.03]***	0.02 [2.98]***	0.02 [3.12]***
D(Fiscal surplus (-1))	-0.03 [1.60]	-0.03 [1.76]*	-0.04 [1.93]*
General election year	0.00 [0.07]		
Independent monetary policy		0.08 [1.23]	
(Independent monetary policy)*(Large) (-1)			0.26 [2.47]**
(Independent monetary policy)*(Small) (-1)			-0.04 [0.48]
Pseudo-R2	0.10	0.11	0.12
Proportion of 1s in the estimation sample (P1)	0.30	0.30	0.30
Proportion of 1s correctly predicted (prediction rule: predicted value = 1 if $P(Y=1) > P1$)	0.68	0.68	0.86
Observations	331	331	331

Probit estimates of the determinants of structural reforms over 1985-2003: stacked up data

	(1)	(2)	(3)	(4) = 3 excluding EPL reforms
Other reforms (-1)	0.05 [5.51]***	0.05 [5.24]***	0.05 [5.41]***	0.06 [5.87]***
Unemployment (-3)	0.01 [3.05]***	0.01 [3.16]***	0.01 [3.13]***	0.01 [3.70]***
Crisis (-1)	0.11 [3.26]***	0.10 [3.05]***	0.10 [3.04]***	0.14 [3.40]***
Small country	0.08 [4.34]***	0.08 [4.50]***	0.09 [3.45]***	0.13 [3.99]***
Fiscal surplus (-1)	0.01 [3.36]***	0.01 [3.43]***	0.01 [3.41]***	0.01 [4.89]***
D(Fiscal surplus (-1))	0.00 [0.89]	-0.01 [1.09]	-0.01 [1.10]	-0.01 [1.41]
General election year	-0.01 [0.37]			
Independent monetary policy (-1)		0.02 [1.01]		
(Independent monetary policy)*(Large) (-1)			0.03 [0.91]	0.09 [2.28]**
(Independent monetary policy)*(Small) (-1)			0.01 [0.66]	0.04 [1.63]
Pseudo-R2	0.09	0.09	0.09	0.13
Proportion of 1s in the estimation sample (P1)	0.13	0.13	0.13	0.15
Proportion of 1s correctly predicted	0.66	0.68	0.68	0.68
Observations	1655	1655	1655	1324



Conclusions

Conclusions

- Some euro area countries – especially the large - need significant structural reform
- The theoretical arguments concerning the effect of EMU on reform go in both directions
- The descriptive evidence is not indicative of a pronounced effect either way
- The econometric evidence is not directly concerned with EMU but suggests that absence of monetary autonomy could retard structural reform in large countries
- These findings are clearly preliminary: could not be confirmed in other OECD paper; empirical literature virtually inexistent
- Still what could be done if this applied to EMU?

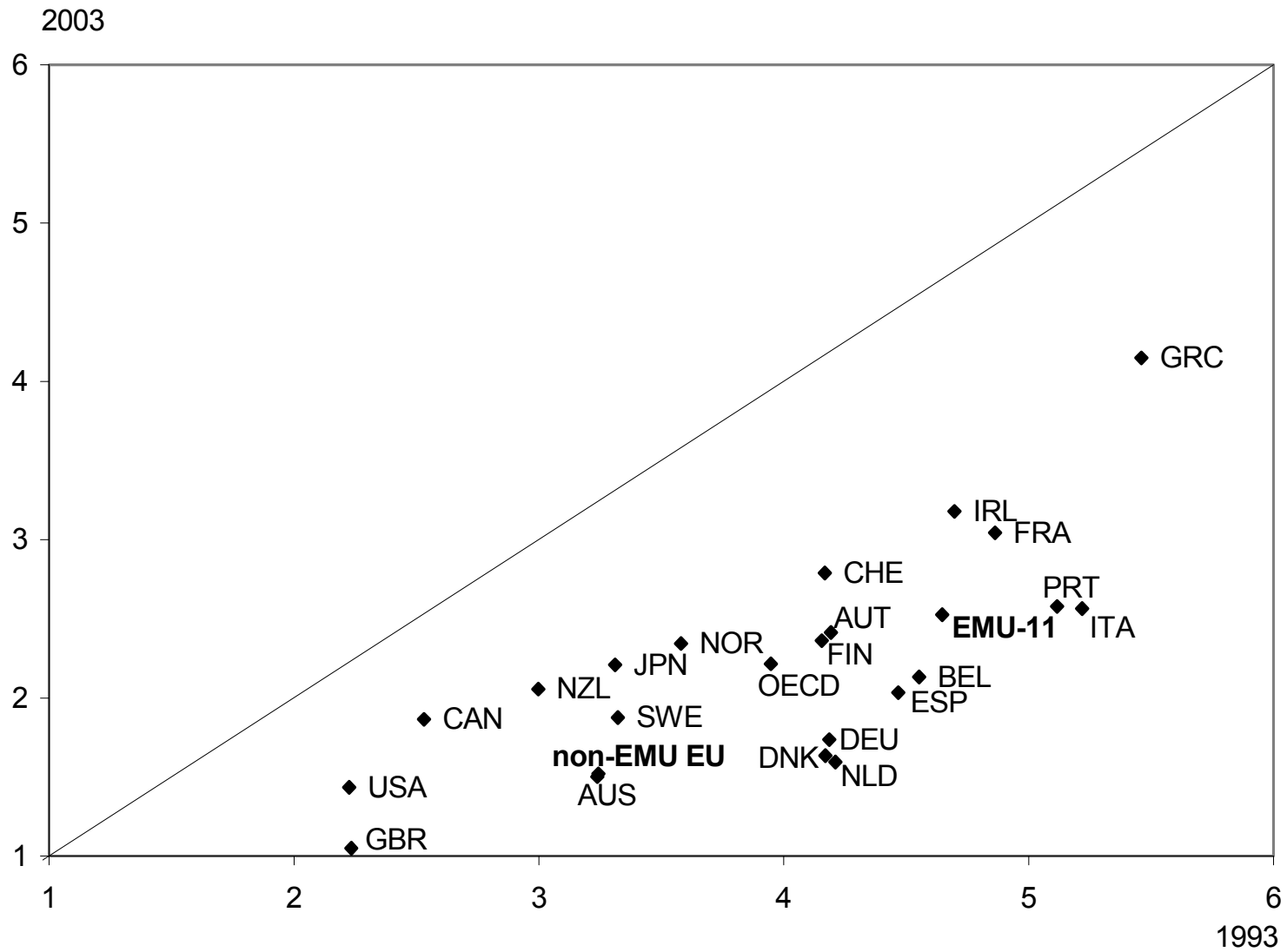


Thank you



Annexes

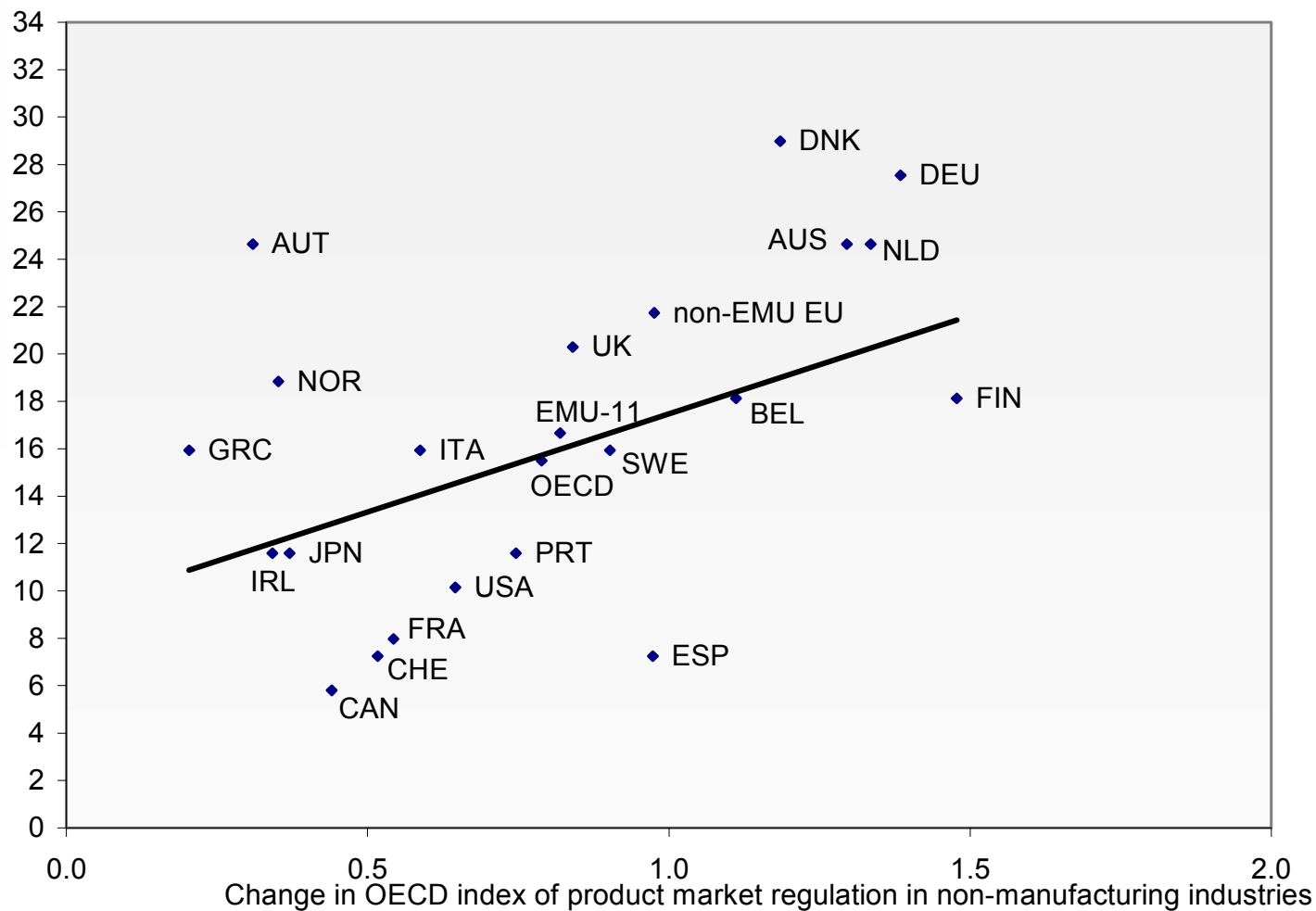
Evolution of the OECD indicator of product market regulation in non-manufacturing industries,* 1994-2003



*: the indicator of regulation is scaled from 0 (most liberal) to 6 (most restrictive).

Changes in product market regulation over 1993-1998 and intensity of labour market reforms over 1999-2004*

Overall labour market reform intensity, per cent



Correlation coefficient: 0.40
 t-statistics 1.91 *