



The economic impact of selected structural reform measures in Portugal (and Italy, France, Spain)

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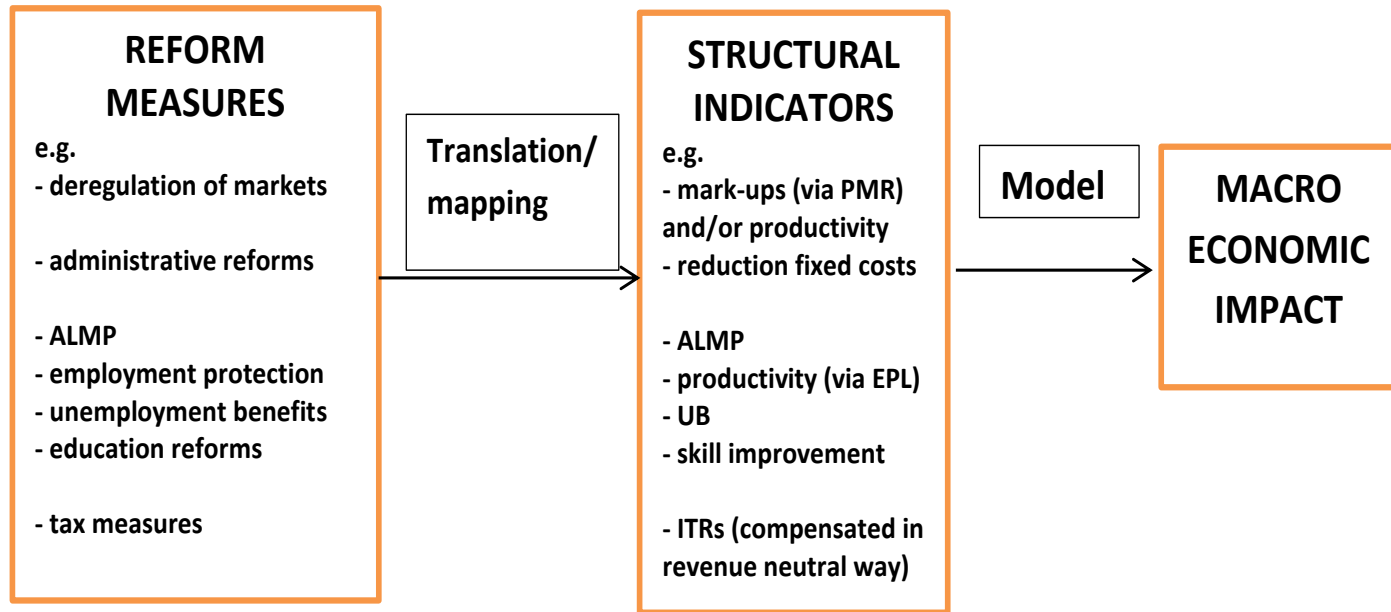
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ECFIN impact assessment structural reforms

- Empirical literature on structural reforms based on stylised facts: e.g., simple elasticities, or hypothetical shocks, assuming 'best practice' (EC, IMF, OECD)
- This paper describes methodology to quantify impact of actual reform measures
 - Selected reform measures during 2013-14-15 period
 - Use rigorous methodology to make results comparable across countries
 - Selected only those measures that could be quantified in a sufficiently reliable and rigorous way
 - Focus on structural component of reforms, i.e. exclude direct fiscal impacts

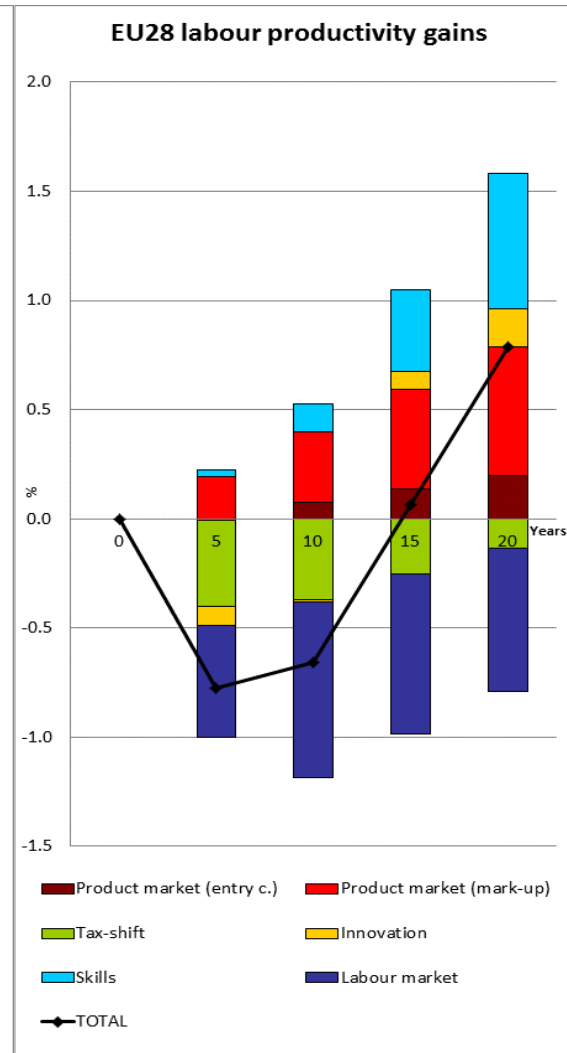
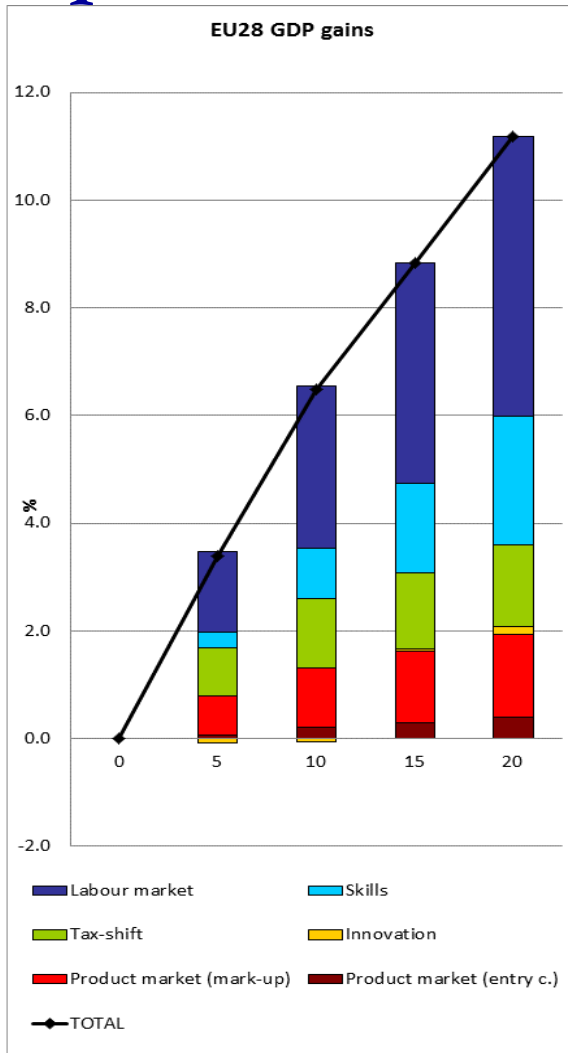


Methodology



Translation of actual reform measures onto structural indicators either direct or indirect

Example: Closing half the gap with best performers



- **Potentially large GDP effects if each MS closes half the gap vis-à-vis best performers:**
 - **GDP after 5 years: EU +3½% (SE +1% ; EL +5%)**
 - **GDP after 10 years: EU +6½% (SE +2% ; EL +10%)**
- **Effects take time to materialise**
 - **Effects of tax shift relatively fast**
 - **Labour market reforms (participation↑) slower**
 - **Innovation and education slowest**
- **Productivity effects of labour market reforms can be negative in short run (but large employment effects).**



Measures quantified for Portugal

- Product market reforms:
 - Professional services
 - Eliminate excessive restrictions and facilitate access
 - Post and telecom
 - Privatisation of CTT and PT Telecom
 - Services Directive
 - Further enactment of outstanding decrees
 - Transport
 - Unbundling and privatisation of CP Carga

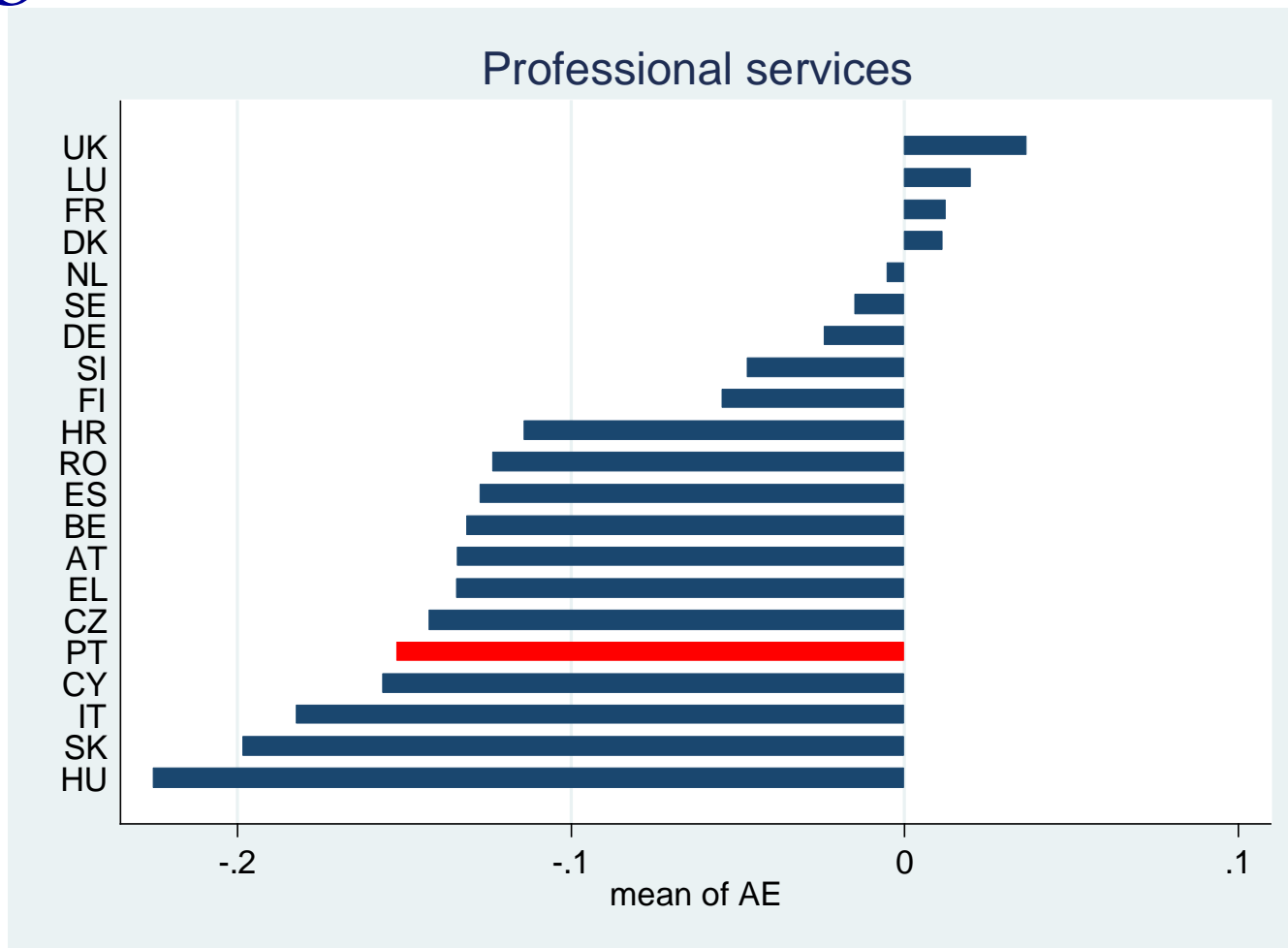


Measures quantified, cont.

- Simplification of public administration
 - SIMPLIFICAR, roadmap to reduce admin burdens
- Labour market reform
 - Reduction of discrepancy workers' protection
- Tax reform
 - 2012/13/14/15 reforms
- Education reform
 - Basic vocational courses for students at risk



Allocative efficiency in prof. services, 2013



Productivity gains of reforms

Productivity gains of the reform of professional services in Portugal

	Legal activities	Accounting activities	Architecture and engineering
PMR before reform	3.88	3.17	2.325
PMR after reform	3.25	3.08	2.47
Δ PMR	-0.63	-0.09	+0.145
Impact on business churn	+1.10%-point	+0.16%-point	-0.25%-point
Impact on AE	+0.036	+0.005	-0.008
Impact on labour productivity (%)	+2.70%	+0.38%	-0.61%

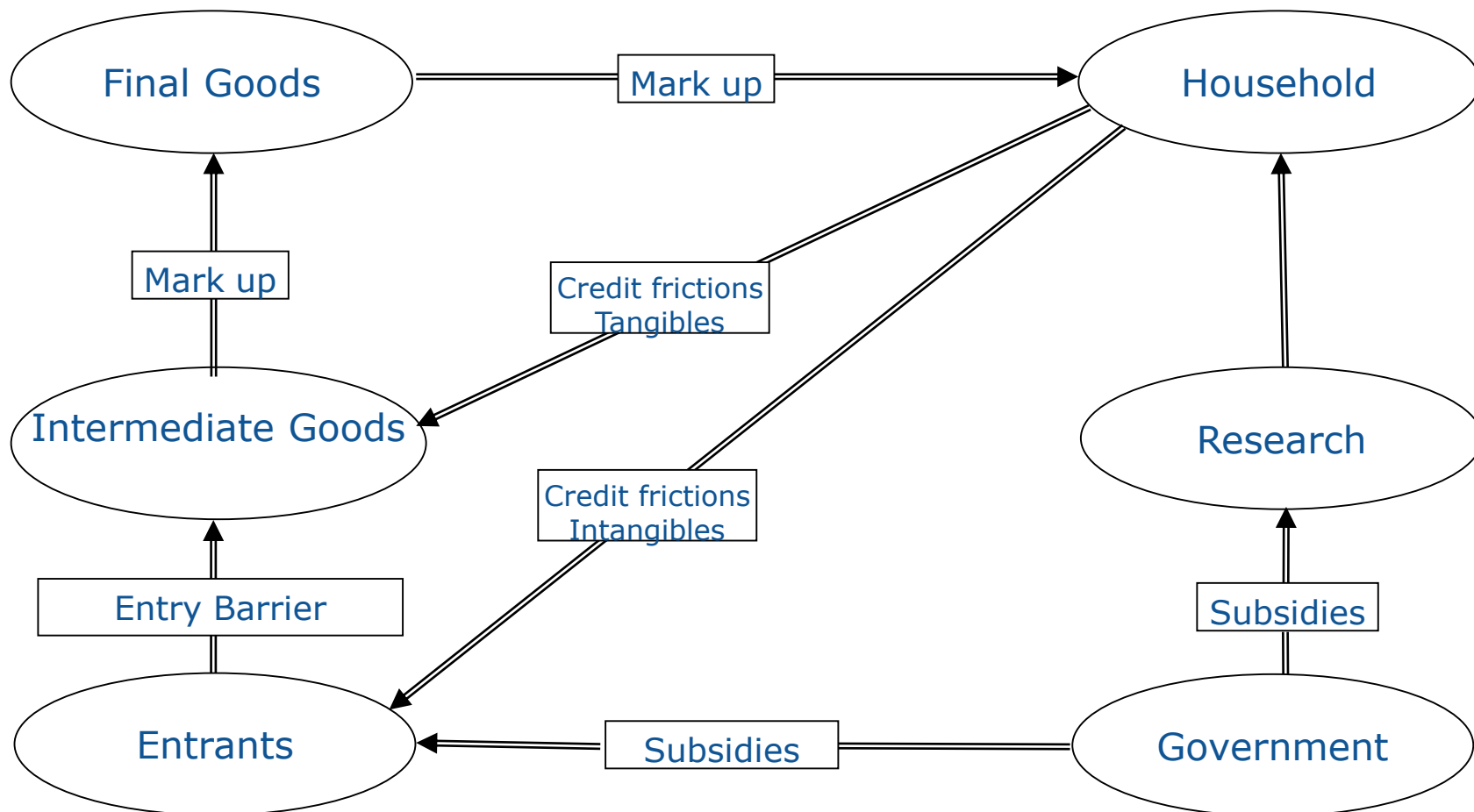


Translation to shocks

Reform	Translation	Model Shocks
Product market reforms: - reform of professional services (2013) - reform of telecom sector (2013) - Services Directive (from 2012) - reform of transport sector (2014)	PMR: -0.1 => Markup: 21 -> 20.5 Allocative efficiency: +2.70 PMR: -1.09 => Markup: 24 -> 22.6 Labour productivity: + 1.8% (level) PMR: -0.18 => Markup: 11 -> 10.8	Services sector Markup: -0.2 Lab. productivity: +0.306%
2012- simplification public adm.	Reduction overhead labour costs 0.15 bn	Fixed lab costs: -0.08% of GDP
2012- labour market reform	EPL -0.93 => Productivity 0.13pp. p.a Benefit replacement rate: 59% -> 48 %	Productivity +1.3% Benefit rep.r: -18.6%
2012 tax reform	ITR_C: 2.77 pp ITR_L: 2.31 pp ITR_K: 3.08 pp Property taxes: +0.03% GDP	ITR_C: 0.74 pp ITR_L: -0.87 pp ITR_K: -0.38 pp Property tax: +0.03% GDP Revenue neutrality (compensated)
2013 education reform	Increase in the number of medium skilled labour force by 13315	Medium sk. share +0.23 pp Low sk. Share - 0.23 pp.



The QUEST III R&D model



The model

Economy populated by:

Households
Low|Medium|High
skilled

Final goods producing firms
Monopolistic competition

R&D institute

Intermediate goods producing
firms
Monopolistic competition

Monetary authority
Central Bank

Fiscal authority
Government



Calibration: Structural indicators in the QUEST model

- Mark-ups (Thum-Thyssen&Canton 2015)
- Entry costs (World Bank)
- Implicit tax rates
(TAXUD/EUROSTAT/EUROMOD)
- R&D tax credits (OECD)
- Shares of low-, medium-, high skilled workers
- Participation rates (females, 55+, low skilled)
- ALMP (EUROSTAT)
- Unemployment benefit generosity (OECD)



Results from QUEST simulations

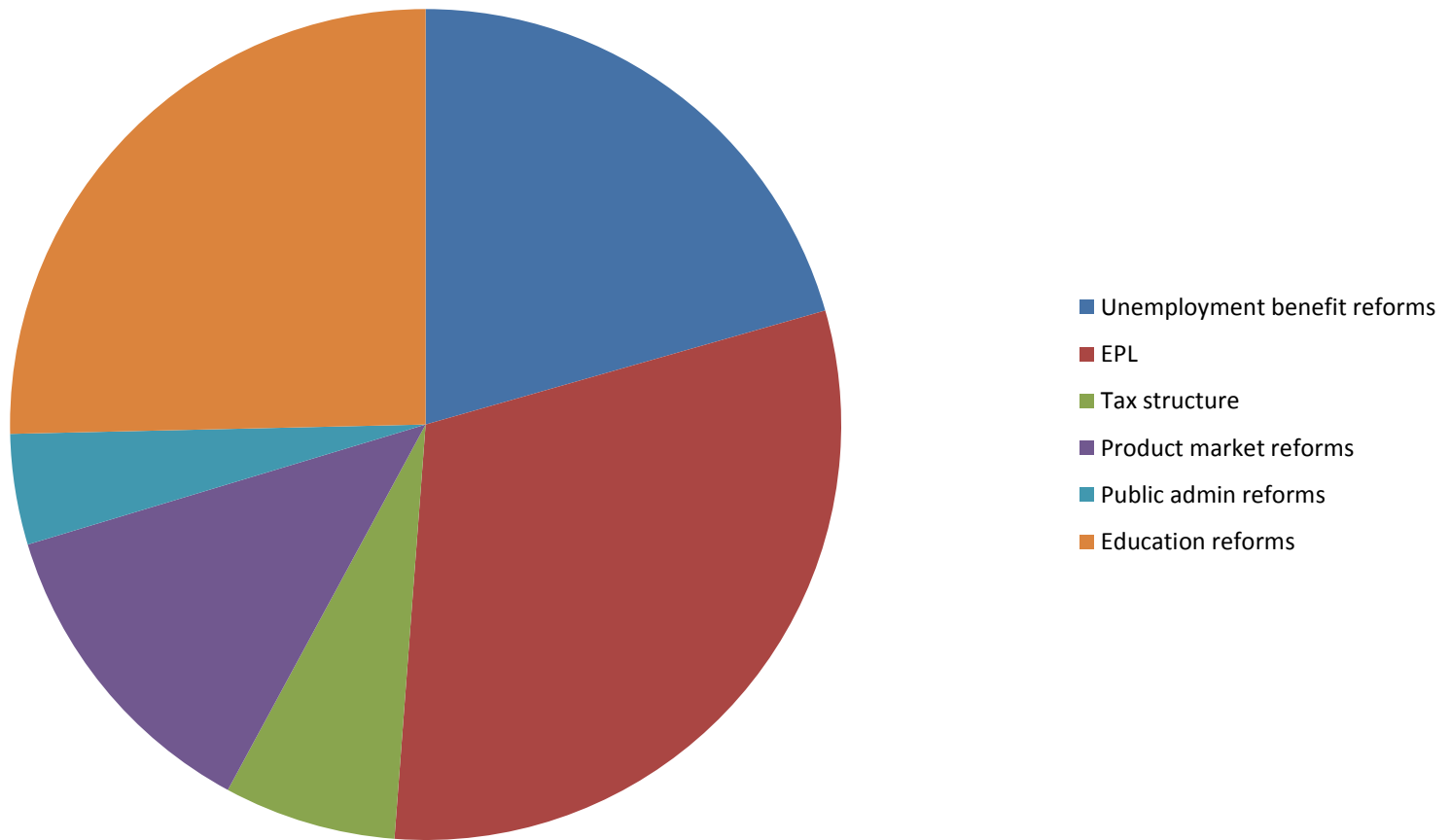
Portugal: sum of simulated measures

Years	2013	2014	2015	2016	2017	2018	2019	2020	2030
GDP	0.28	0.64	0.94	1.19	1.44	1.66	1.87	2.08	3.77
Employment	0.15	0.44	0.67	0.80	0.89	0.96	1.02	1.08	1.65
Trade balance (% of GDP)	0.21	0.32	0.34	0.35	0.35	0.34	0.34	0.34	0.34
Gov. balance (% of GDP)	0.75	1.06	1.28	1.46	1.65	1.84	2.03	2.23	4.78

- GDP : significant positive effects (+2.1% by 2020), larger in long run
- Positive employment effect (+1.1% by 2020)
- Trade balance: small positive effect
 - Competitiveness effect dominates demand effect
- Budget balance: positive



Decomposition GDP effects 2020



Summary of results (1)

- Increase in GDP and employment.
 - GDP by 2020: FR +0.4; IT +1.3 ; ES +1.3 ; PT +2.1
 - That could add between 0.1-0.3 pp to growth rates
 - Even larger GDP gains in longer run
- Positive impact on government finances (higher tax revenues)
- This could be underestimation of impact of structural reforms (we were not able to quantify many measures) or overestimation (too optimistic assumptions on implementation?)
- Estimates from national authorities are sometimes even higher
- Translation of reform measures surrounded by large uncertainties



Summary of results (2)

- GDP by 2020: FR +0.4; IT +1.3; ES +1.3; PT +2.1
- Compare to benchmarking exercise (GDP gains if each country closes half the gap with best performers):
GDP by 2020: FR +4.2; IT +3.9; ES +3.2; PT 2.4
- Reforms implemented/planned so far make some progress, but more can be done.



Quantification is a challenging task

- Not all measures are easily quantifiable: some measures have not been assessed
 - deemed insignificant,
 - not clear how the macroeconomic impact of the reforms, if any, could be quantified.
- 'Translation' of reform measures into quantifiable changes in structural indicators is surrounded by large uncertainties:
 - (in)direct quantification of the measures,
 - assumed implementation speed
 - robustness of empirical estimates on which the assessment had to rely.
- Results are not strongly model-dependent, but may be sensitive to certain model assumptions: e.g. fiscal and monetary policy assumptions, compensatory payments, etc.

=> Estimates are surrounded by large uncertainties and should be interpreted with caution.



THANK YOU



Italy : measures

Reform	Translation	Model Shocks
2012 liberalisation package: - reform of professional services - reform of the energy sector	PMR: -0.49 => Markup 19.3 -> 16.8 Allocative efficiency: +0.028 PMR: -0.095 => Markup 25.7 -> 25.4	Services sector Markup: -0.2 Lab. productivity: 2.04
2012-13 simplification public adm.	Reduction overhead labour costs 2.9bn	Fixed lab costs -11.6%
2012-13 labour market reform	EPL -0.183 => Productivity 0.0063pp. p.a ALMP:1.5bn	Productivity +0.16 ALMP +5.5%
2013 tax reform	ITR_C: +0.55pp ITR_L: - 0.34pp Revenue neutrality (compensated)	ITR_C: +0.47pp ITR_L: -0.25pp ITR_K:+0.08pp
2014 tax reform	ITR_C: +1.84pp ITR_L: - 2.87pp ITR_K:+2.22pp Revenue neutrality (compensated)	ITR_C: +1.61pp ITR_L: - 3.36pp ITR_K:+1.79pp
2014 public administration	Reduction administrative costs 0.66bn	Fixed lab costs -3%
2014-15 labour market reform	EPL -0.27 => Productivity 0.0378pp p.a.	Productivity +0.98
2015 competition law and privatisation plans	Electricity: PMR -0.06 => Markup -0.1 Communication: PMR -0.45=> markup -0.56	Services sector Mark-up -0.05pp
2015 education law	Increase no. of teachers 0.07% of GDP Gradual improvement skill distribution	S_high +0.05 S_medium +0.3 S_low -0.35



Italy

Italy: sum of simulated measures from NRP 2013, 2014 and 2015

Years	2013	2014	2015	2016	2017	2018	2019	2020	2030
GDP	0.11	0.28	0.54	0.80	0.95	0.99	1.10	1.29	2.50
Employment	0.03	0.27	0.66	0.97	1.18	1.29	1.39	1.47	2.18
Trade balance (% of GDP)	0.00	0.00	-0.06	-0.10	-0.08	0.01	0.06	0.07	0.05
Gov. balance (% of GDP)	0.06	0.11	0.26	0.32	0.39	0.36	0.37	0.45	0.94

- GDP : significant positive effects (+1.3% by 2020)
- Larger gains in longer term
- Positive employment effect (+1.5% by 2020)
- Budget balance: positive (due to higher tax revenues)



France : measures

Reform	Translation	Model Shocks
2015 Tax reform	ITR_L: - 2.40pp ITR_K:- 1.90pp Revenue neutrality (compensated)	ITR_C: +0.81pp ITR_L: - 0.75pp ITR_K:+0.01pp
2015 Product markets: - Partial privatisation network sectors - Sunday + evening openings - Regulated professions - electricity regulated tariffs	Engie : PMR -0.0175 => markup -0.165 Orange: PMR -0.02 => markup -0.025 PMR: -0.03 => markup -0.14 PMR: -0.13 => markup -0.66 Allocative efficiency +0.0075 Price change implied by new methodology => markup -0.16	Final goods Markup -0.21 Productivity +0.03
2015 R&D measures	Tax credit R&D +0.02% of GDP Public investment +0.07% of GDP (compensated by exp cuts)	R&D tax credit +0.02 Public investment +0.07
2015 Labour market	ALMP:1.465bn	ALMP +0.07
2015 Education	Increase no. of teachers 60,000 Gradual improvement skill distribution	S_medium +0.61 S_low -0.61



France (2015 NRP measures)

France: sum of simulated measures from NRP 2015

Years	2014	2015	2016	2017	2018	2019	2020	2030
GDP	0.11	0.20	0.25	0.26	0.30	0.32	0.35	0.43
Employment	0.14	0.25	0.29	0.29	0.30	0.31	0.31	0.36
Trade balance (% of GDP)	-0.03	-0.02	0.00	0.02	0.03	0.03	0.03	0.04
Gov. balance (% of GDP)	0.07	0.12	0.18	0.19	0.22	0.24	0.27	0.50

- GDP: significant positive effects (+0.35% by 2020)
- Employment: similar
- Budget balance: improvement (due to higher tax revenues)



Spain

Reform	Translation	Model Shocks
2012 Tax reform	ITR_C: +1.18pp ITR_L: + 0.17pp ITR_K:+ 0.71pp Revenue neutrality (compensated)	ITR_C: +0.65pp ITR_L: - 1.22pp ITR_K:- 0.30pp
2013 Market Unity Law:	Reduction in barriers for start-ups	Entry costs -35%
2012 Retail reform	PMR: -0.73 => Markup 14.3-> 11.0	Final goods Markup -0.5
2012 Unemployment benefit	UB after 6 months 60% -> 50%	NRR -3pp
2012 Employment protection	EPL -0.14	Productivity +0.14
2013 Pension reform	Labour force participation 60-64 age: +3.2 (2020); +6.9 (2060)	Labour force 60-64: +14%
2014 Tax reform	ITR_L: - 0.83pp ITR_K:- 1.26pp Revenue neutrality (compensated)	ITR_C: +0.33pp ITR_L: - 0.03pp ITR_K:- 0.65pp



Spain

Years	2013	2014	2015	2016	2017	2018	2019	2020	2030
GDP	0.17	0.37	0.59	0.72	0.86	1.01	1.16	1.31	2.80
Employment	0.31	0.58	0.78	0.89	0.98	1.07	1.18	1.29	2.54
Trade balance (% of GDP)	0.23	0.26	0.22	0.23	0.23	0.23	0.24	0.25	0.31
Gov. balance (% of GDP)	0.72	0.97	1.20	1.33	1.48	1.64	1.81	1.98	4.14

- GDP : significant positive effects (+1.3% by 2020), larger in long run
- Positive employment effect (+1.3% by 2020)
- Trade balance: small positive effect
 - Competitiveness effect dominates demand effect
- Budget balance: positive (pension reform)

Italy : Measures not quantified

- Reform public administration: enabling law – ultimate impact will depend on implementing decrees
- Simplification (agreement between state and regions): difficult to assess potential impact
 - IT NRP(2015) assumes reduction overhead costs based on 1995-2000, and further admin costs reduction based on digital agenda estimates.
- Justice reform: could be assessed via impact of reduction of FIC and litigation rates (ECFIN 2014) but implied $\frac{1}{4}$ increase in birth rate somewhat unrealistic
- Transport Authority and broadband: no impact on PMR
- Insolvency framework and banking sector: not clear yet how to capture this



France: measures not quantified

- Territorial reform: existing estimates focus on agglomeration productivity effects in larger metropolitan areas (based on wages, focus on cities, not country-wide effect)
- Simplification reform: net benefits for businesses are estimated to be negative
- Various product market measures: not captured in changes in PMR indicator (including coach travel , still regulated for journeys <100km)
- Various labour market measures: not captured in changes in EPL indicator



Spain: measures not quantified

- ALMP reform 2013: a 30% cut (fiscal consolidation)
- 2013 rental market reform: insufficient information of impact on participation, effect likely to be small
- Entrepreneurship law: impact small
- Liberalisation professional services: no impact on PMR
- Competition petroleum retail: minor impact
- Judicial reform: insufficient information about impact
- Insolvency framework: not clear yet how to capture this



Portugal: measures not quantified

- PSC
- Privatisation EDP, REN
- Wage setting institutions
- Measures to support internationalisation
- Reforms of judicial system

