

# **Is Portugal Restructuring To Take Advantage of Globalization? A view from the “Sunbelt-5” (France, Italy, Portugal, Greece and Spain)**

## **Some Preliminary Findings – Not for Quotation**

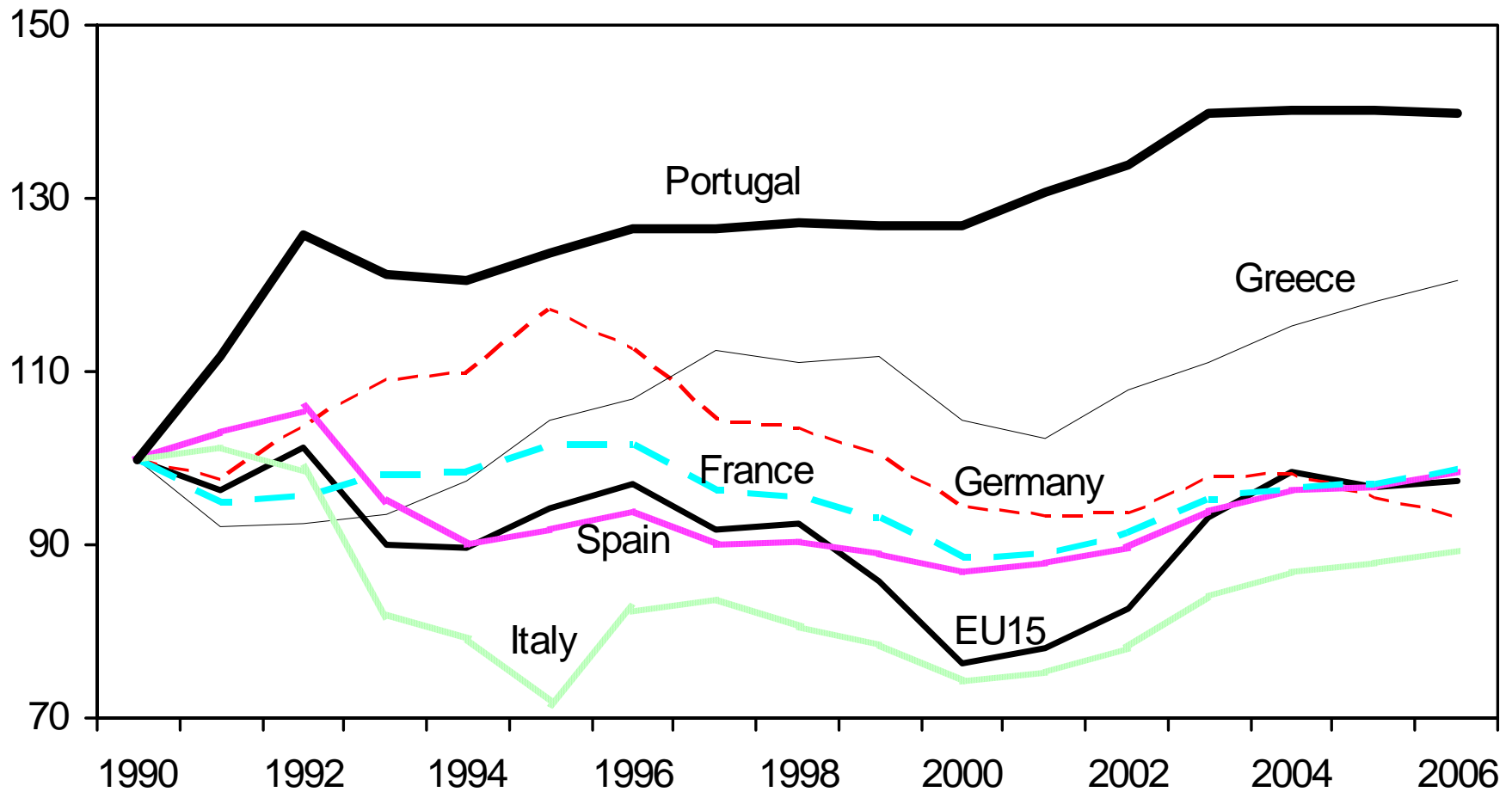
**Workshop on Portugal and the challenges of globalization**

**Work of a team of economists (S. Fabrizio, E. Gutierrez, I. Ivaschenko, B. Lissovaolik, M. Moreno-Badia, W. Schule, Y. Xiao led by J. Escolano ) in the IMF’s European Department, presented by James Daniel**

**Lisbon, November 5, 2007**

# The motivation – substantial appreciation of the REER

Real Effective Exchange Rate Based on Normalized ULC, 1990=100



Source: Eurostat.

We try to answer this big question by approaching it from various angles

1. ***Does external trade data show the sunbelt moving to products with more value-added/greater mark-up?*** (Broken down into “sub-angles”)
2. ***Does firm-level data show evidence of moving to industries with more value-added/greater mark-up?***
3. ***Has the sunbelt moved towards (higher quality) services?***
4. ***Has the sunbelt been attracting FDI?***

# Subangles to Angle 1

- 1.1 Sunbelt exports are moving to markets with less competition?*
- 1.2 Sunbelt exports are moving into sectors and countries that are fast growing?*
- 1.3 Sunbelt countries are advancing in the search for new markets/products?*
- 1.4 Sunbelt countries are taking advantage of globalization by importing low-value added, mass-manufactured goods?*

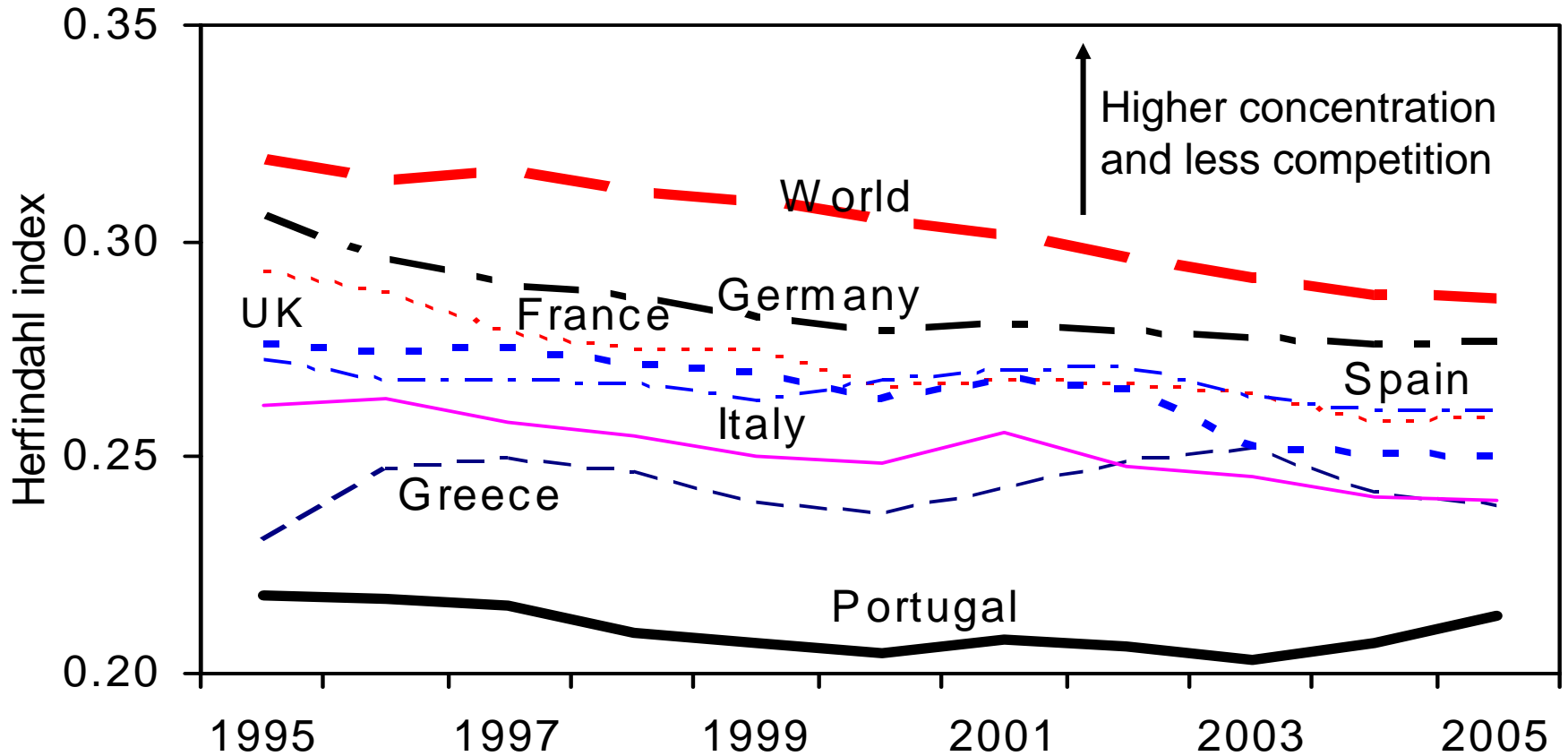
OK, now let's look at what the data suggest

# Angle 1: Sub-Angle 1

*Sunbelt exports are moving to markets with less competition?*

# Portugal faces the most intense competition of the sunbelt, but is moving recently to less competitive markets

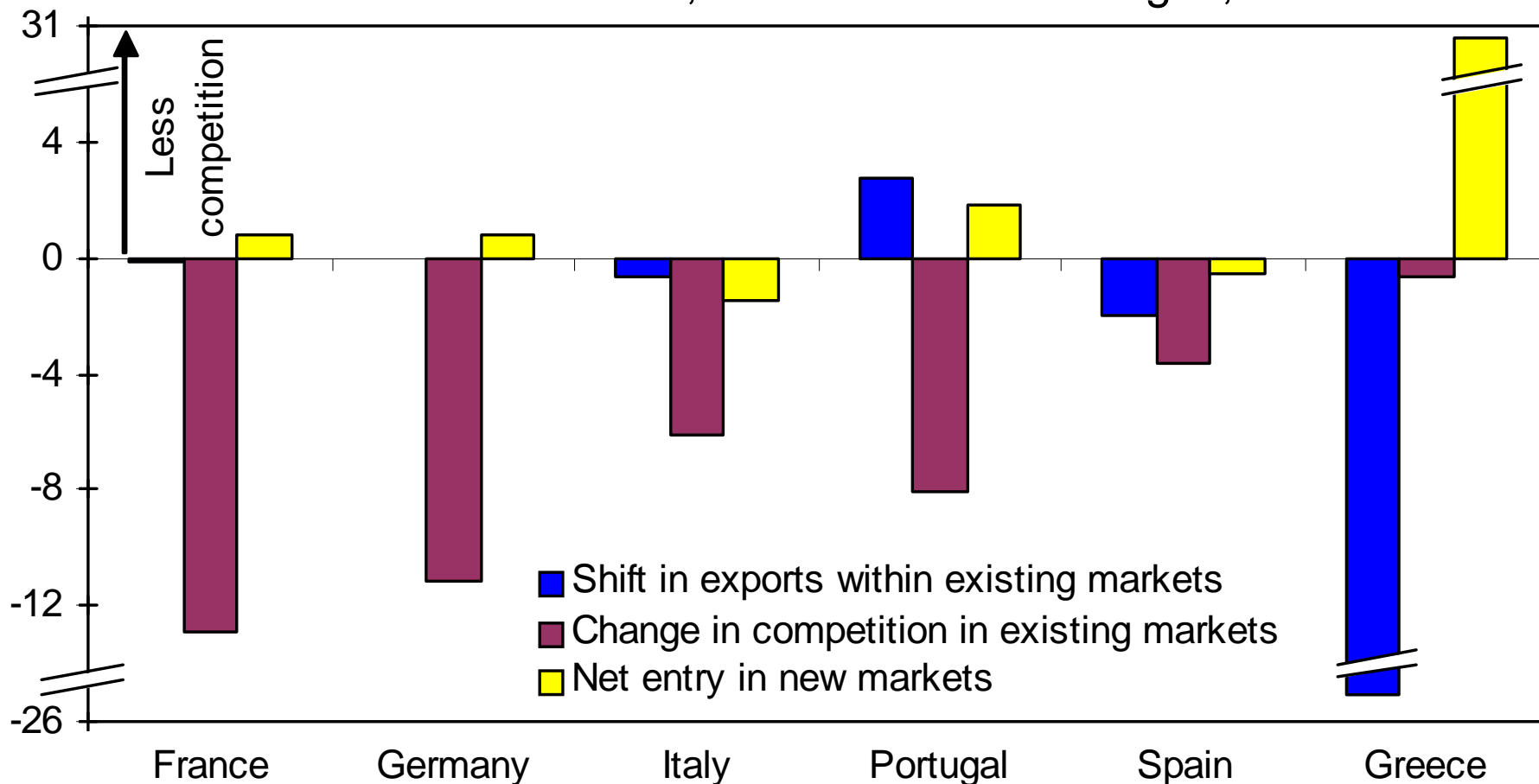
## 1.1a. Market Concentration, 1995-2005



Sources: COMTRADE; and staff's calculations.

# Portugal's new markets are less competitive; and within existing markets, exports are being reorientated to the less competitive

1.1b. Market Concentration, Contributions to Changes, 1995-2004

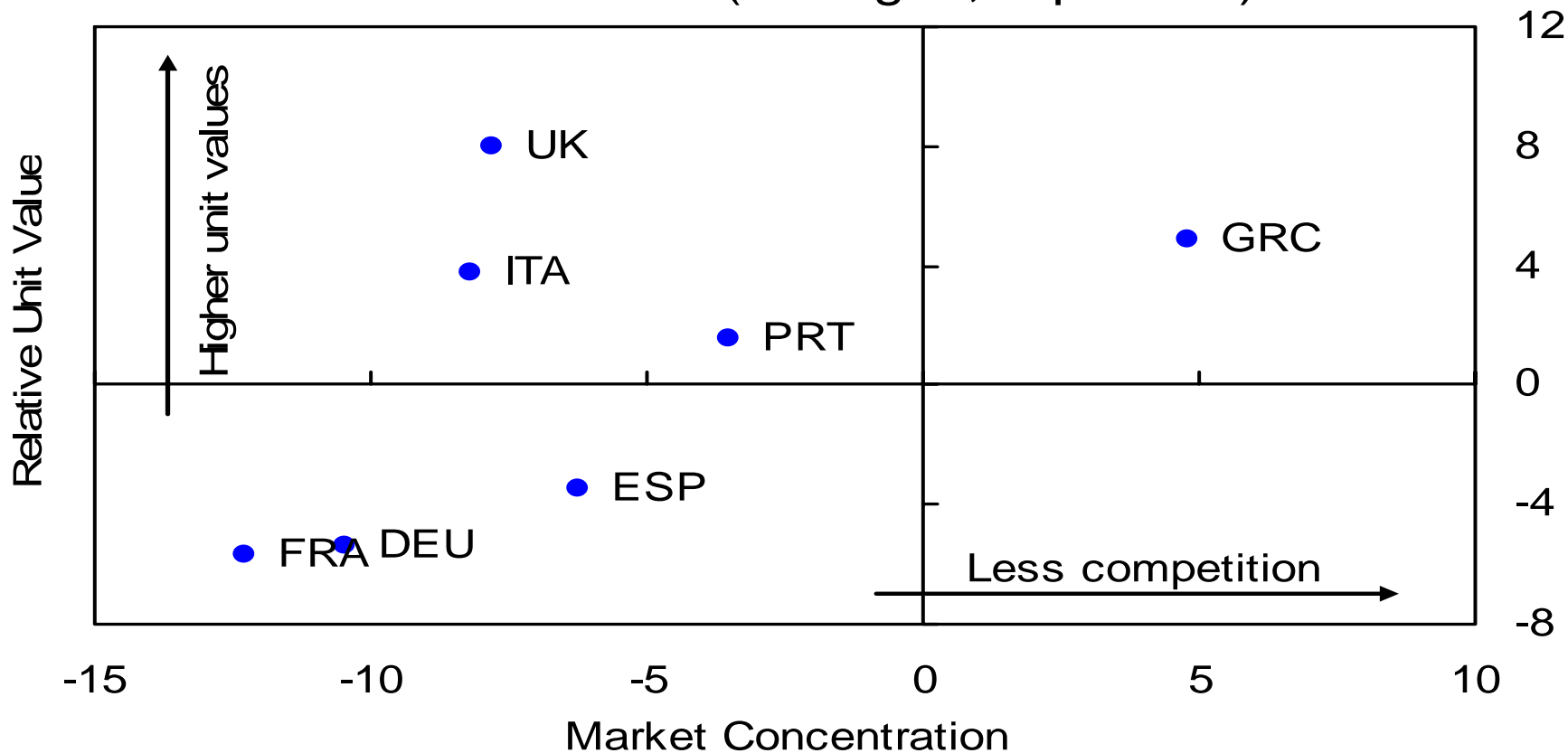


Sources: Comtrade, and staff's calculations.



# Italy and Portugal have succeeded in raising unit values in traditional markets despite higher competition.

1.1c. Market Concentration and Relative Unit Value 1995 and 2004 (Changes, in percent)



Sources: COMTRADE; and staff's calculations.

## **Summary of Angle 1.1 - *Sunbelt exports are moving to markets with less competition?***

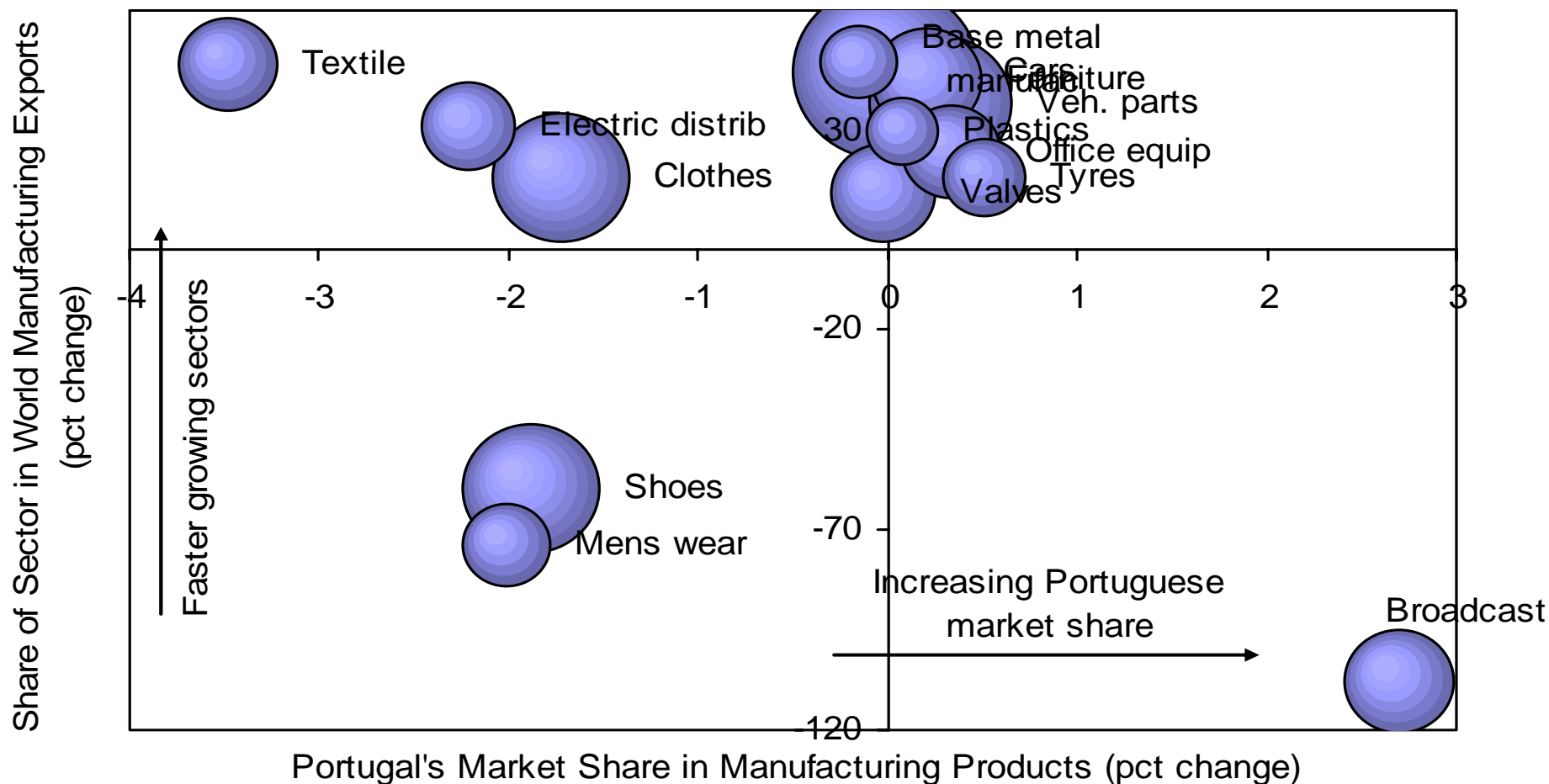
- Overall: Somewhat positive – Portugal, somewhat more than for other sunbelt countries, has moved to markets that are less competitive, but from a weaker base

## Angle 1: Sub-Angle 2

*Sunbelt exports are moving into sectors and countries that are fast growing?*

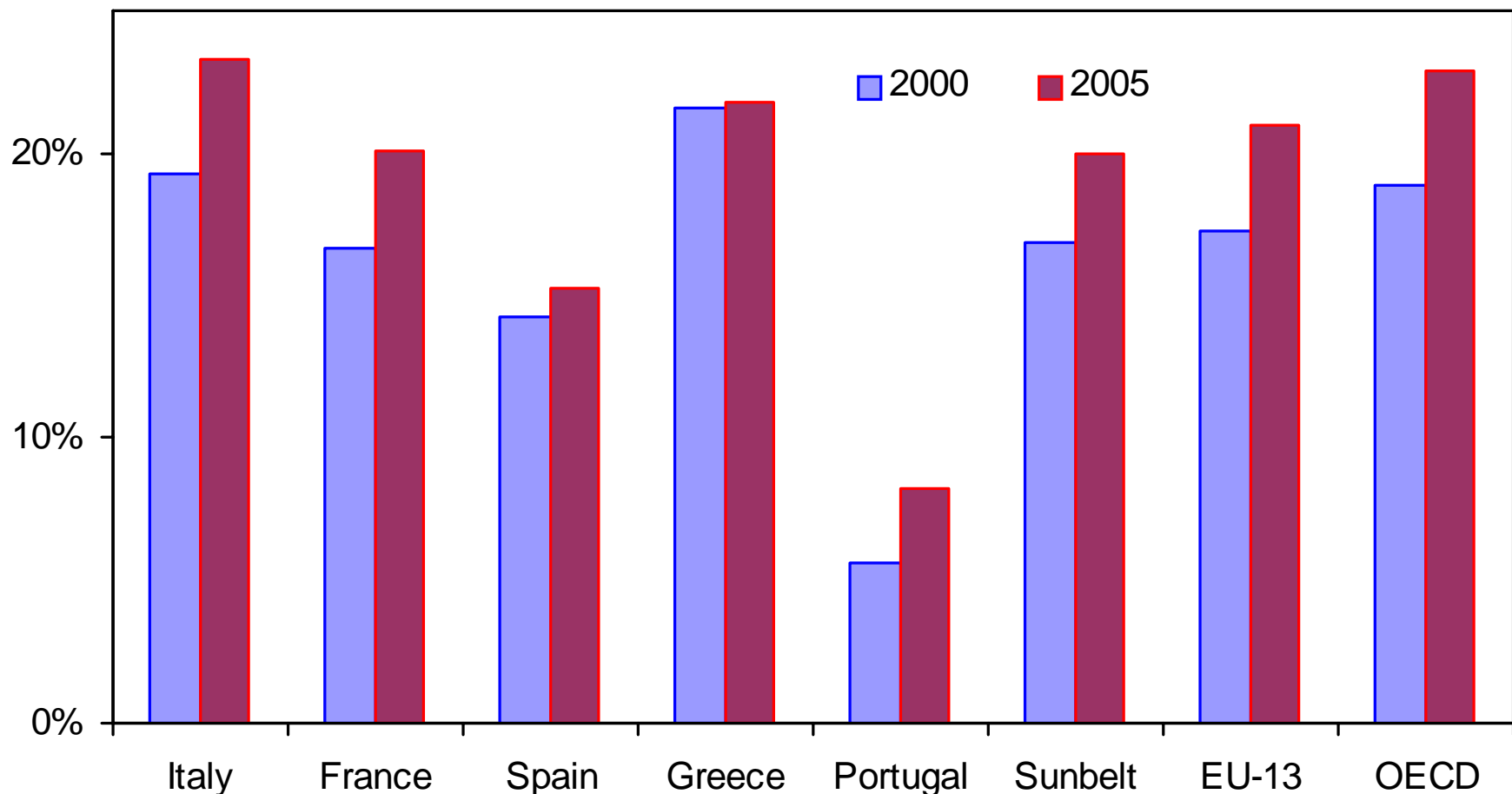
**Italy, and to a lesser extent Spain and Portugal's, specialization is low-growth, but Portugal has been improving market share in fast growing sectors**

1.2a. Manufacturing Exports in Portugal: 1995-2005  
 (size of bubbles proportional to USD value of exports, largest 15 SITC-3 sectors)



## Sunbelt countries on average “undertrade” with fast growing countries, especially Portugal, though Portugal is shifting towards high-growth countries

1.2b. Exports to 43 dynamic economies as percent of own Export 2000-05



## Summary of Angle 1.2 - Sunbelt exports are moving into sectors and countries that are fast growing?

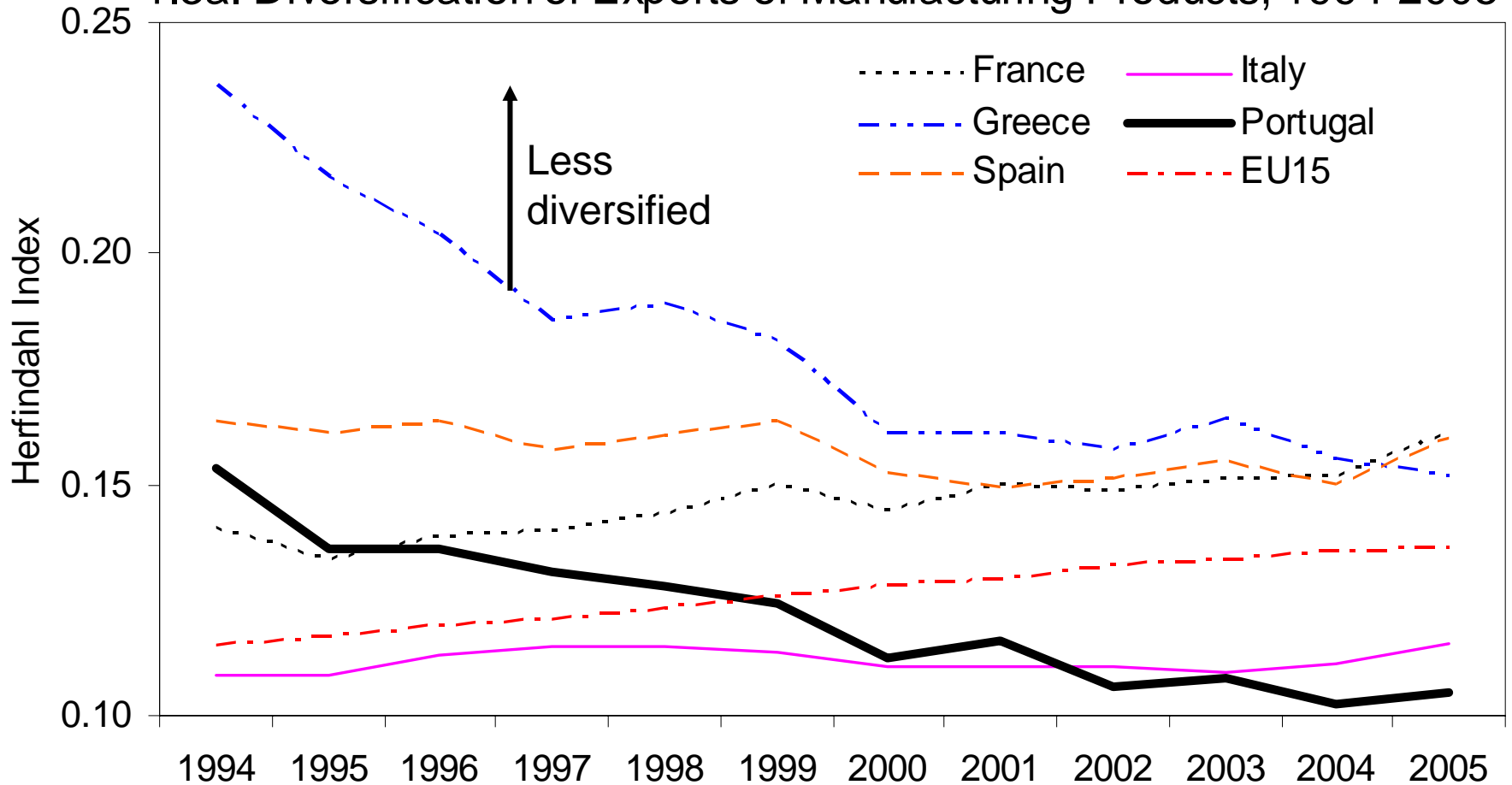
- Overall: mixed – while Portugal has a non-dynamic initial product and country specialization, it is moving trade shares towards fast-growing countries and sectors (as are other sunbelt countries), from a low base (which might though indicate more room for growth)

## Angle 1: Sub-Angle 3

*Sunbelt countries are advancing in the search for new markets/products?*

# Export structure, especially Portugal and Greece, has diversified

## 1.3a. Diversification of Exports of Manufacturing Products, 1994-2005

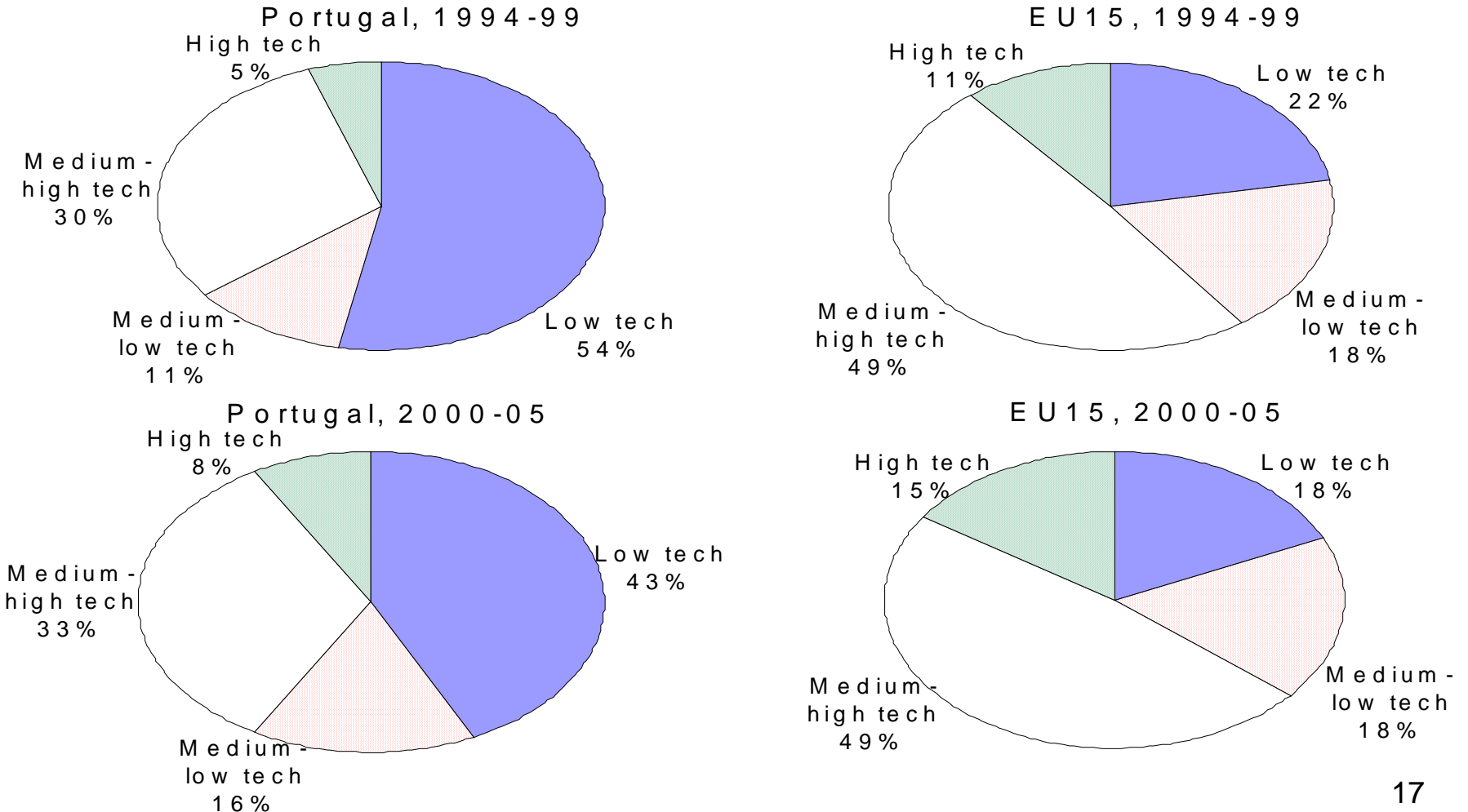


Sources: Comtrade; and staff calculations



# Sunbelt countries, especially Portugal and Greece, have moved up the technology ladder, though Portugal remains well behind the EU-15

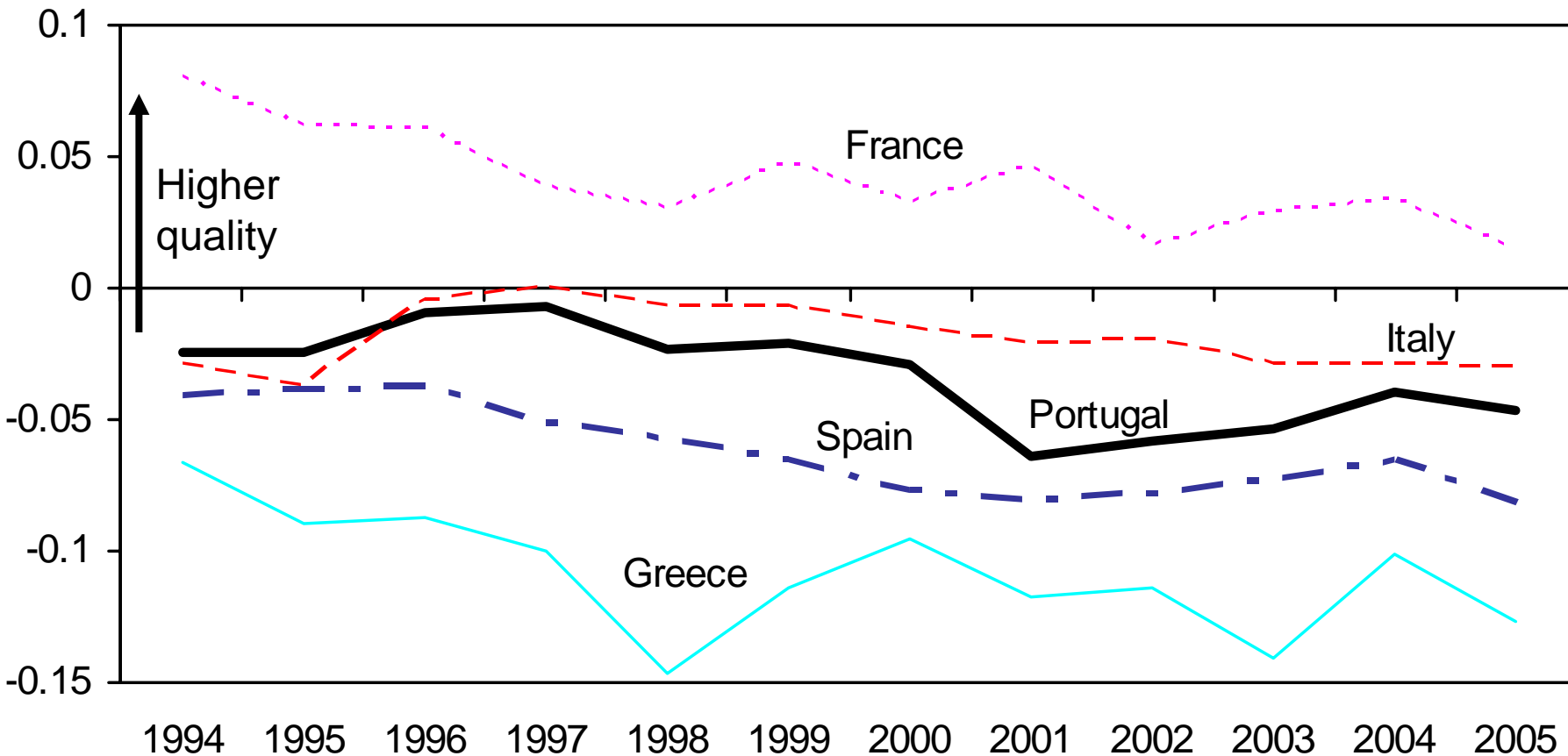
1.3b. Shares of Nominal Exports of Manufacturing Products by Technology Intensity, 1994-2005



Sources: COMTRADE; and staff calculations.

# Export quality gap increased with EU-15 competitors (but improved slightly with the rest of the world) especially for goods with higher potential (goods with differential pricing)

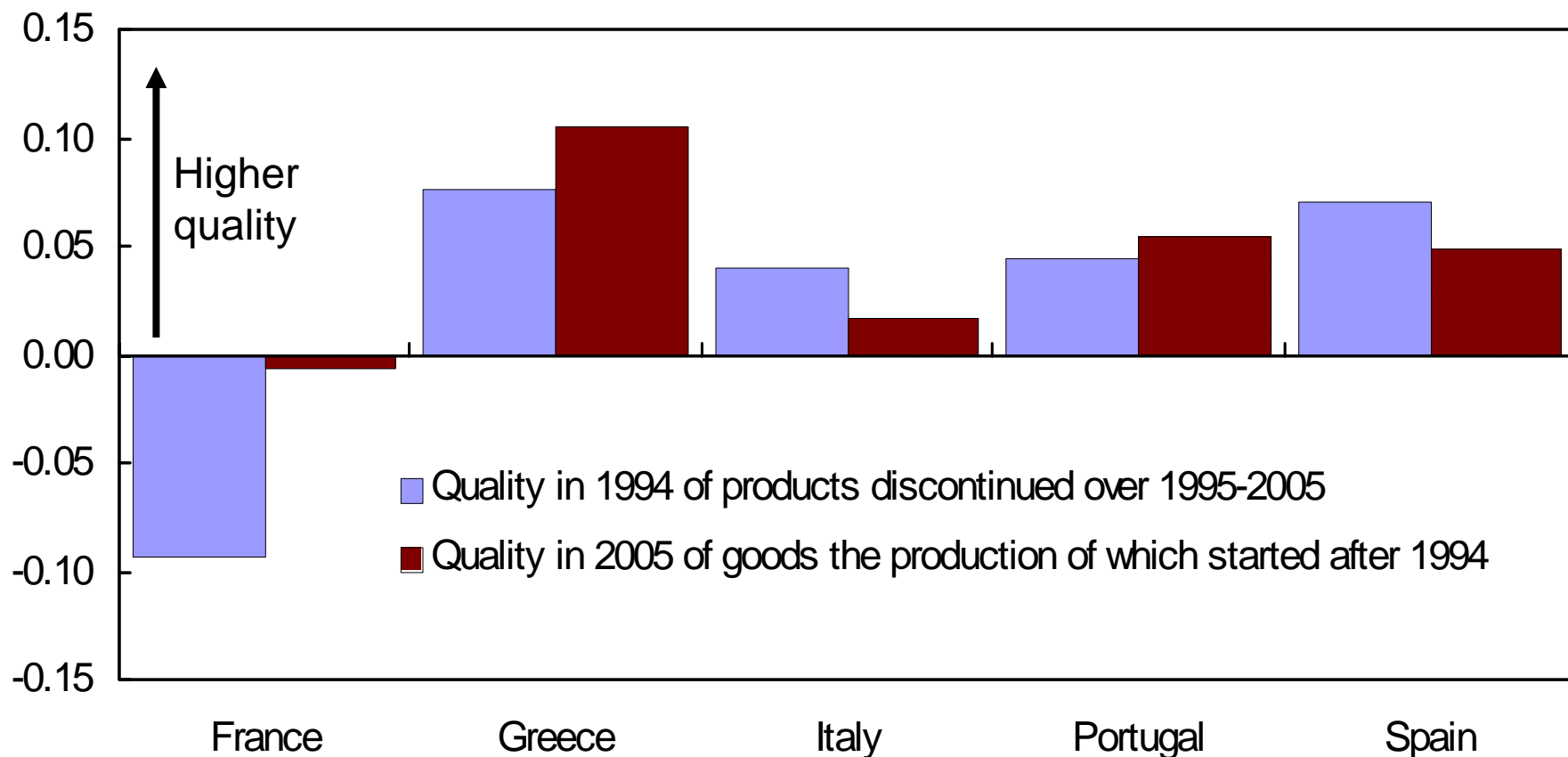
## 1.3c. Unit Value Ratios Relative to EU-15 Competitors



Sources: Comtrade; and staff calculations.

## New Portuguese exports were of marginally higher quality than discontinued exports

1.3d. Quality of Discontinued Products Vis-a-Vis Quality of New Products, 1994 and 2005



Sources: COMTRADE; and staff calculations.

## **Summary of Angle 1.3 - Sunbelt countries are advancing in the search for new markets/products?**

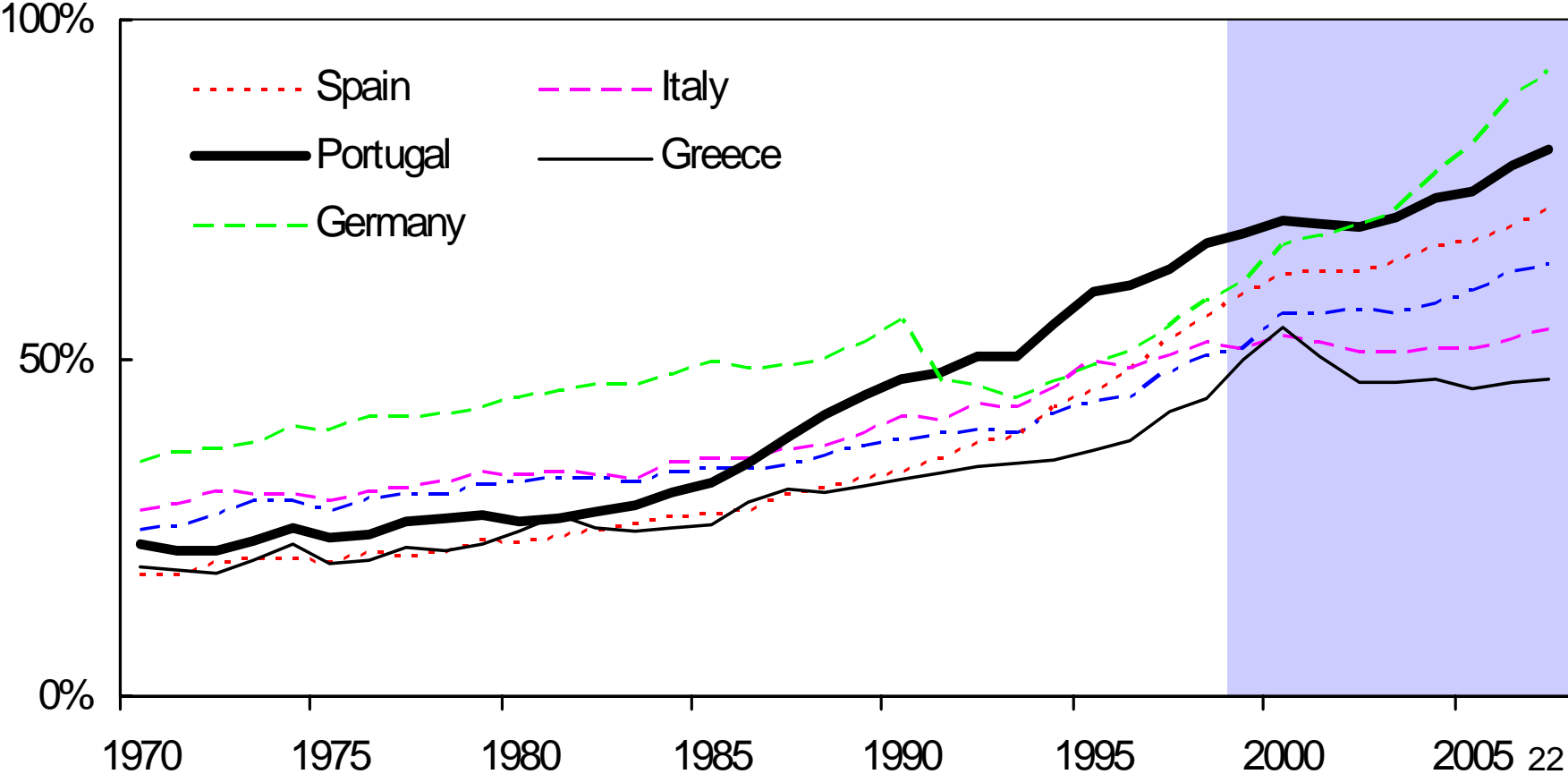
- Overall: mixed: change is happening but better quality needed

## Angle 1: Sub-Angle 4

*Sunbelt countries are taking advantage of globalization by importing low-value added, mass-manufactured goods?*

# All sunbelt countries, especially Portugal, have become more open to trade

1.4a. Openness to Trade: (export+import)/GDP



# Most imports come from the EU, Chinese imports are small (especially for Portugal), but emerging market imports have been increasing

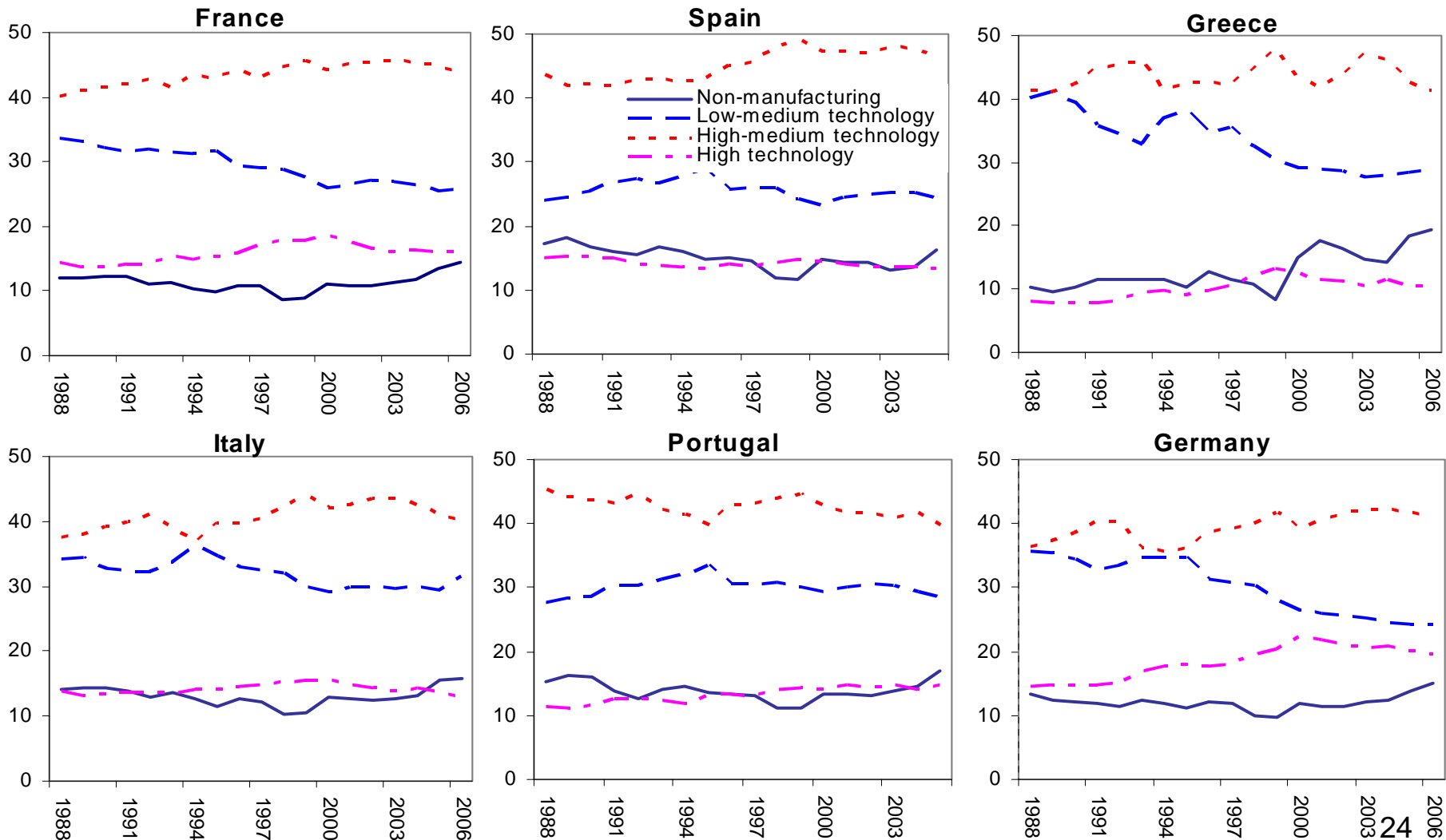
## 1.4b. Where do imports come from ?

France		Greece		Italy		Portugal		Spain		
World	100	World	100	World	100	World	100	World	100	
Country rank										
1	Germany	19	Germany	13	Germany	18	Spain	28	France	16
2	Belgium	10	Italy	12	France	11	Germany	14	Germany	16
3	Italy	9	France	6	Netherlands	6	France	10	Italy	9
4	United Kingdom	7	Russia	6	United Kingdom	5	Italy	6	United Kingdom	6
5	Spain	7	Netherlands	6	Spain	4	United Kingdom	5	Netherlands	5
6	Netherlands	7	United Kingdom	4	Belgium	4	Netherlands	5	Belgium	4
7	United States	6	United States	4	Africa	4	Belgium	3	China: Mainland	3
8	China: Mainland	3	Korea	4	United States	4	United States	3	United States	3
9	Switzerland	3	Spain	4	China: Mainland	4	Nigeria	2	Portugal	3
10	Japan	2	Belgium	4	Switzerland	3	Japan	2	Japan	2
11	Russia	2	Saudi Arabia	3	Russia	3	Brazil	2	Russia	2
12	Norway	2	China: Mainland	3	Austria	3	Norway	1	Algeria	2
13	Ireland	1	Japan	3	Libya	2	Sweden	1	Switzerland	1
14	Portugal	1	Iran, I.R. of	3	Japan	2	Russia	1	Ireland	1
15	Sweden	1	Turkey	2	Algeria	2	China: Mainland	1	Sweden	1

Source: Direction of Trade

# Imports have become more somewhat technologically intensive (marginal for Portugal, Italy and Greece)

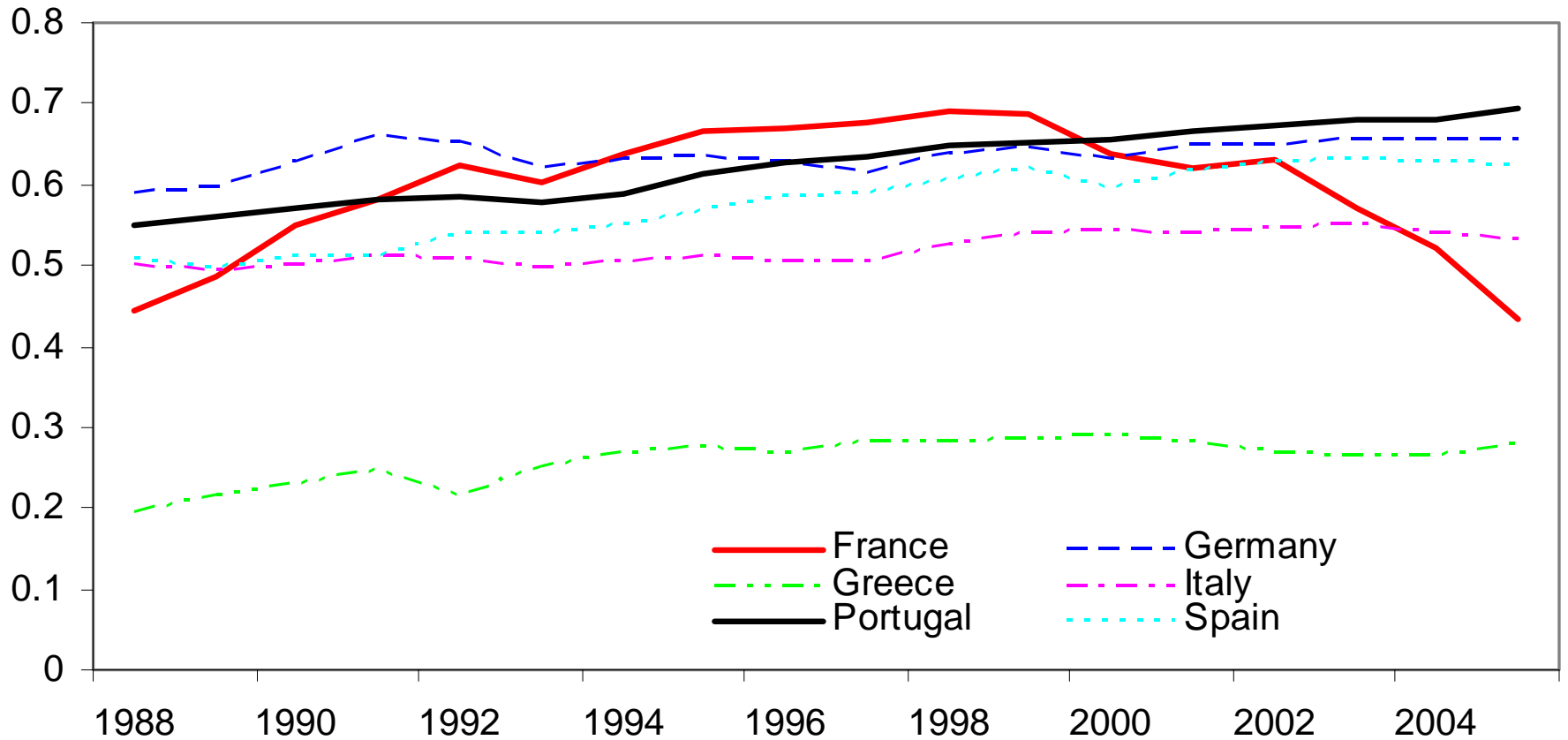
## 1.4c. Product Structure of Imports by Technology





# Intra-industry trade is increasing (except for France)

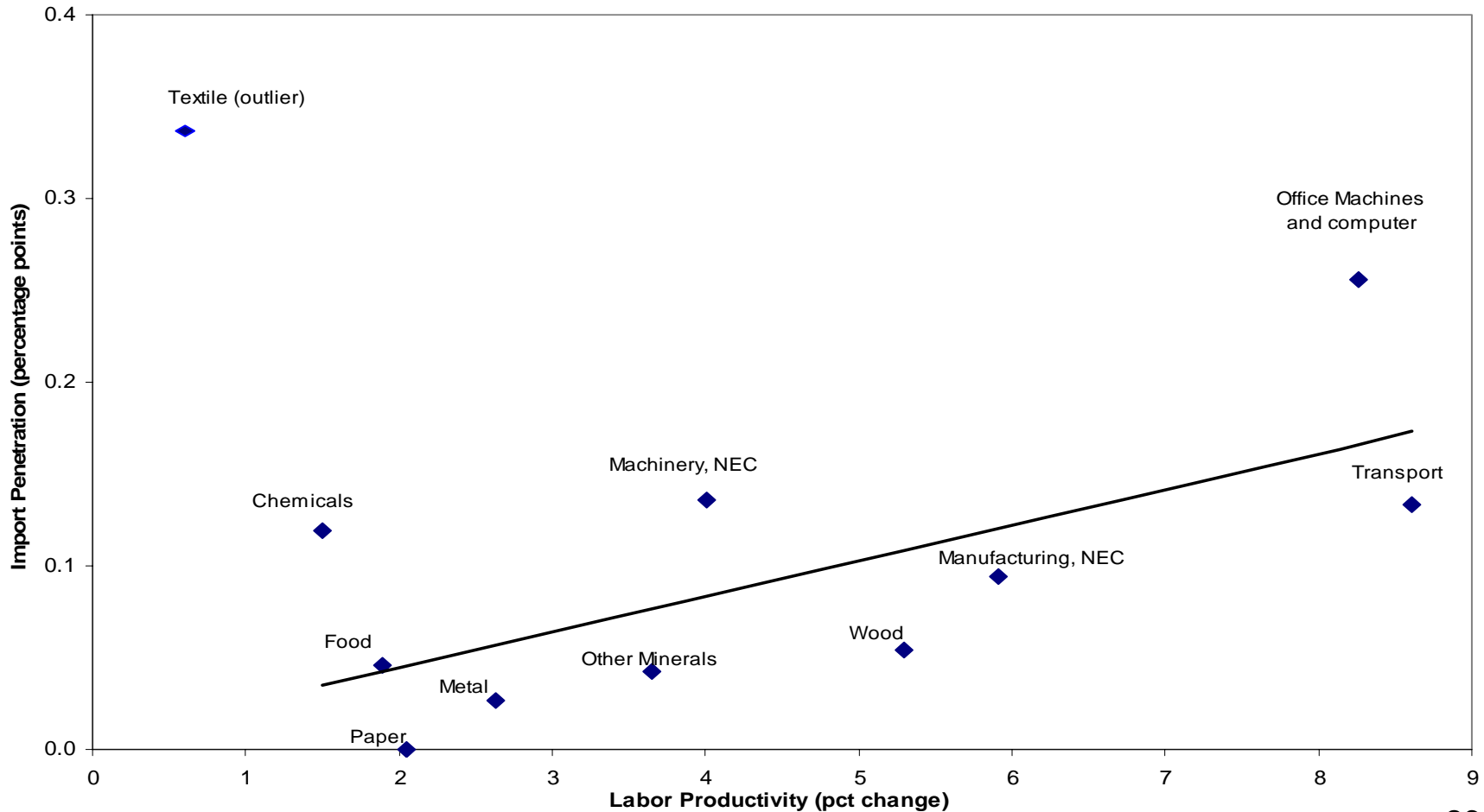
1.4d. Intra-industry Trade (GLI)



Source: COMTRADE, 4 digit SITC rev 3.

# Import penetration and labor productivity are broadly correlated

1.4e Portugal: Import Penetration and Labor Productivity (1988-2004, manufacturing)



## **Summary of Angle 1.4 - Sunbelt countries are advancing in the search for new markets/products?**

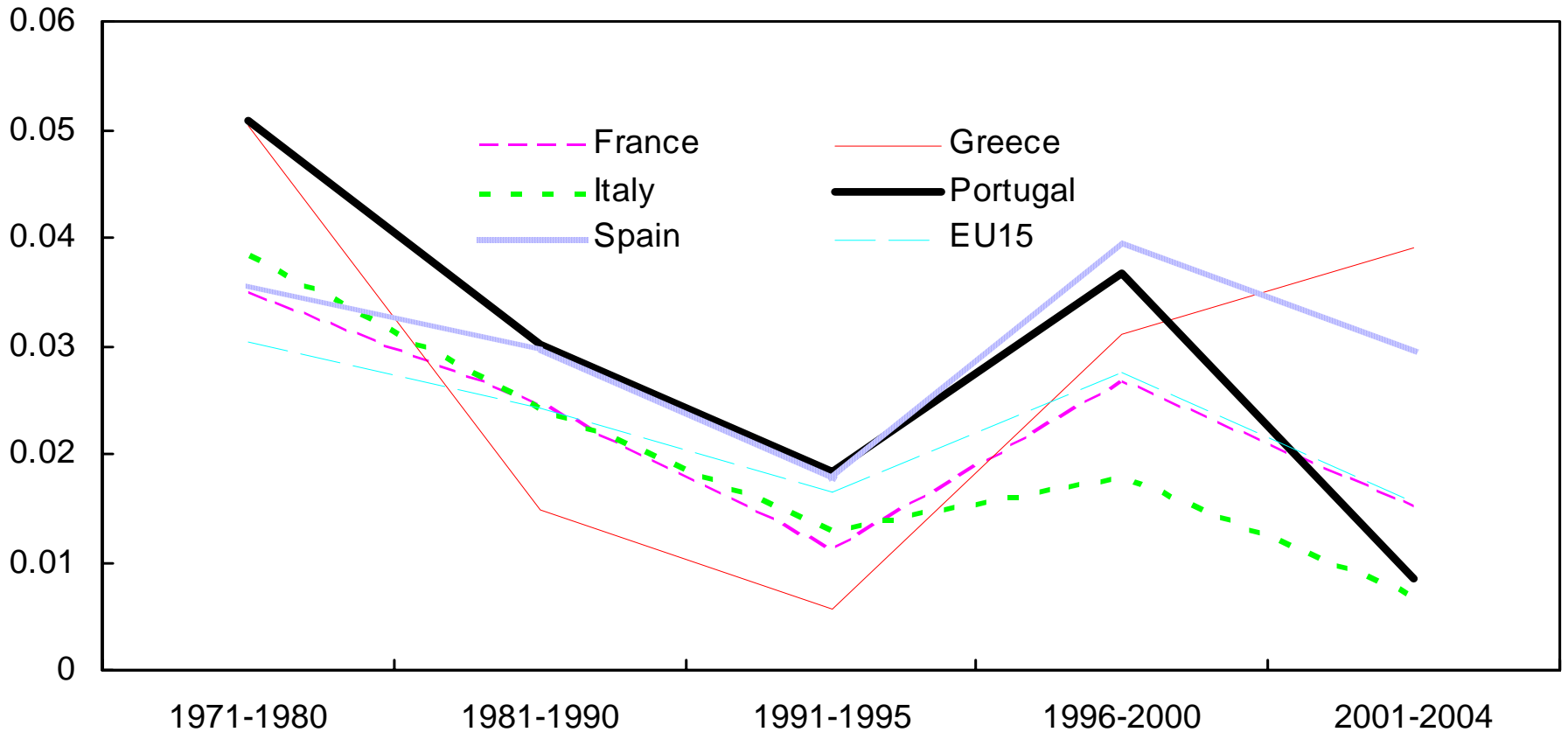
- Overall: slightly positive – not much change in import composition, but labor productivity has improved where imports have penetrated

## Angle 2

***Does sector-level data show evidence of moving to industries with more value-added/greater mark-up?***

# Real value added grew more slowly in sunbelt than EU15 last decade, especially Italy and Portugal

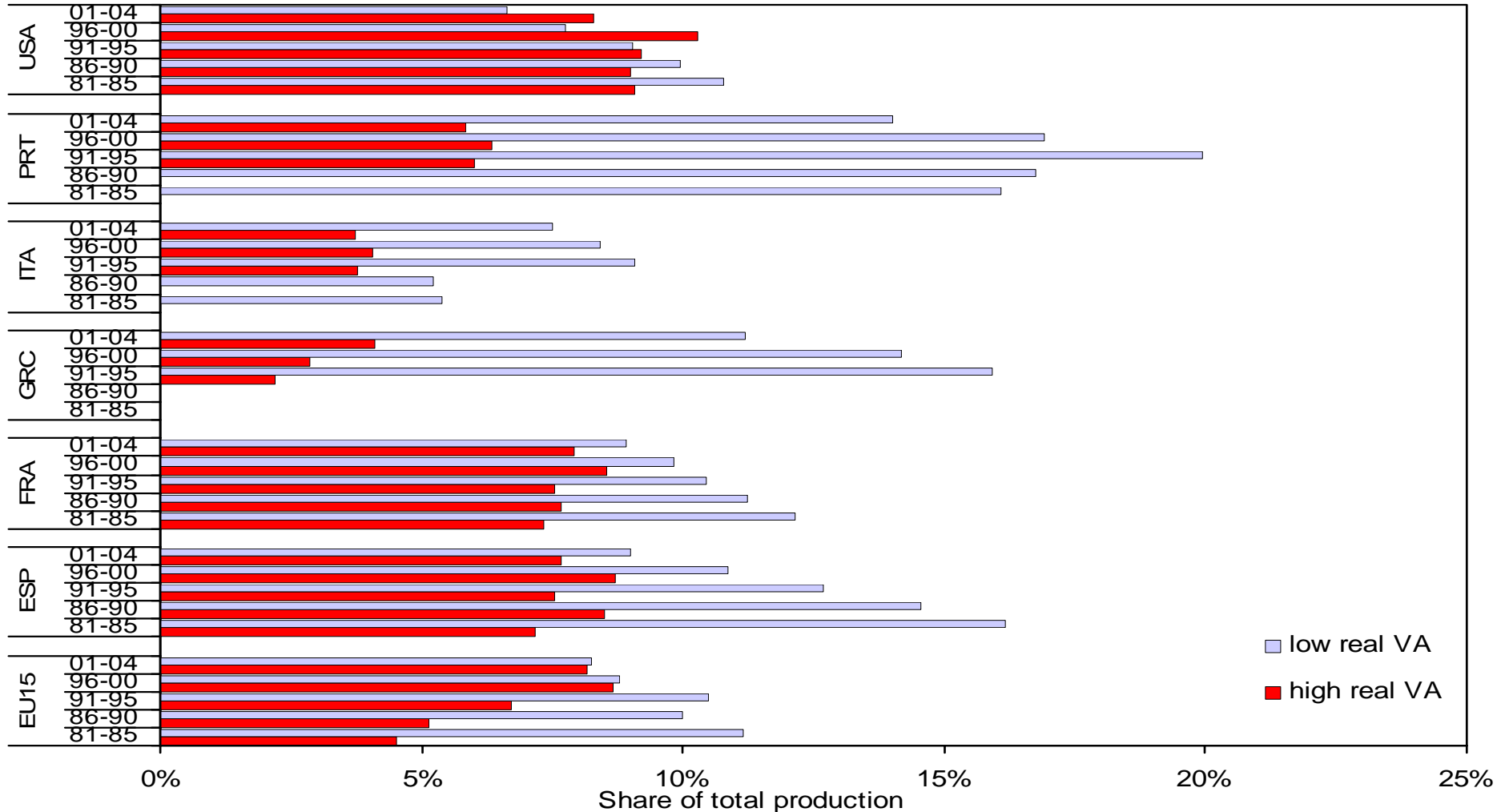
## 2a. Real Value-added, Average Annual Growth Rates



Source: EU KLEMS, Staff calculations

# Share of dynamic industries is below EU and US averages, especially in Portugal, but shares are growing and dynamism within sectors is improving

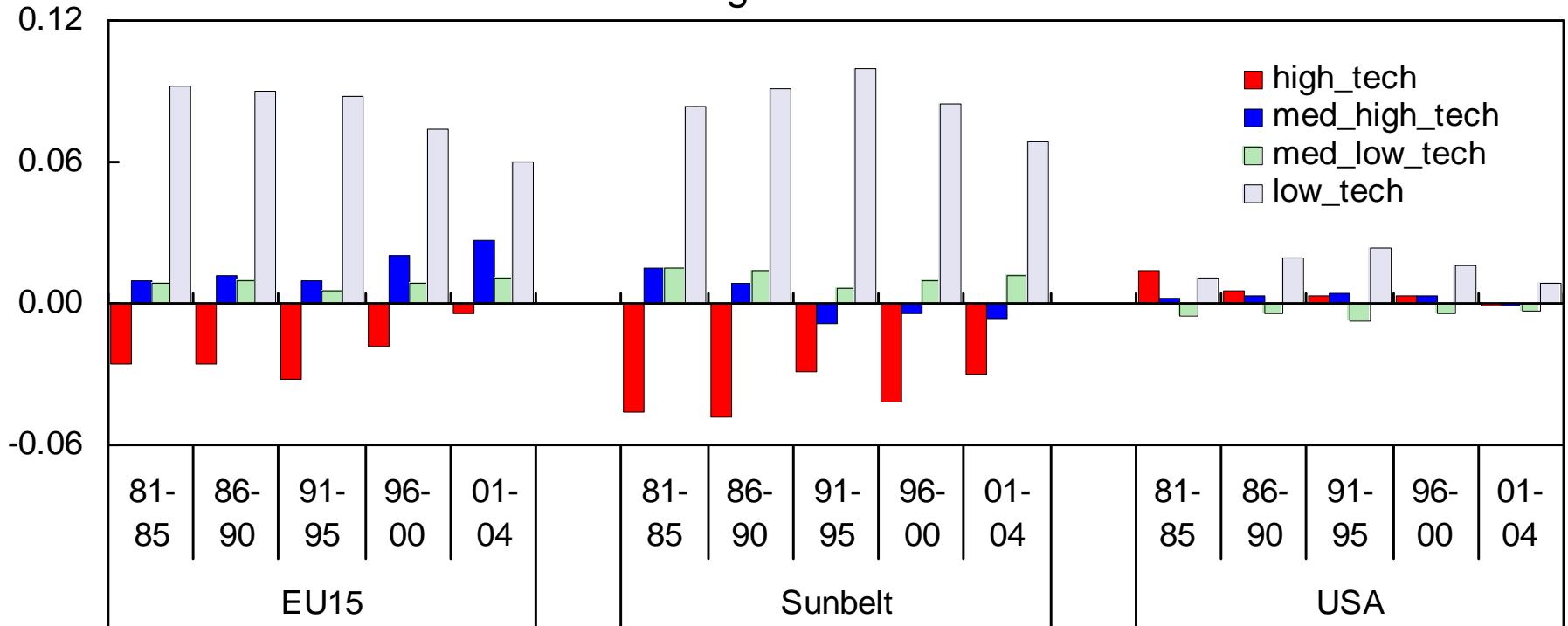
2b. Dynamic Content Based on Real Value-Added Growth 1\



1\ High (low) real VA industries are defined as top (bottom) ten industries in terms of real VA growth each year.  
Sources: EU KLEMS; staff calculations.

# Technological content of value added only improved slowly and less fast than EU

## 2c. Relative Technological Content: Sunbelt and RoW



The relative index of technological content is constructed for each industry, as a difference between industry's share in each country's production and its share in global production. The value of index above zero indicates that the country is relatively more concentrated in any particular sector than the rest of the world.

Source: EU KLEMS, OECD, Staff calculations

## **Summary of Angle 2 - Does sector-level data show evidence of moving to industries with more value-added/greater mark-up?**

- Overall: negative – sunbelt countries have been moving to higher value industries but from a relatively low base and relatively slowly

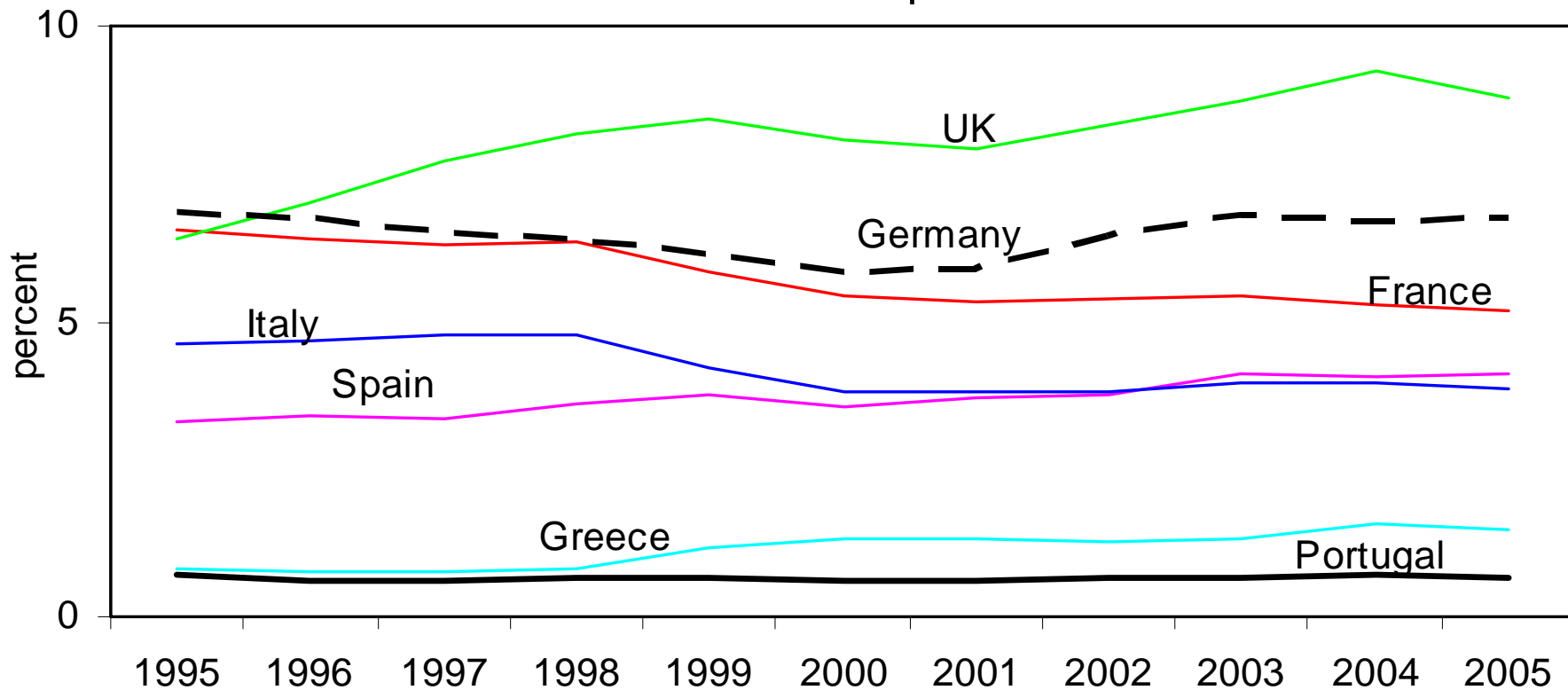


## Angle 3

***Has the sunbelt moved towards (higher quality) services?***

**Greece and Spain increased their market share in total world imports of services, Portugal remained stable – other large EU countries increased**

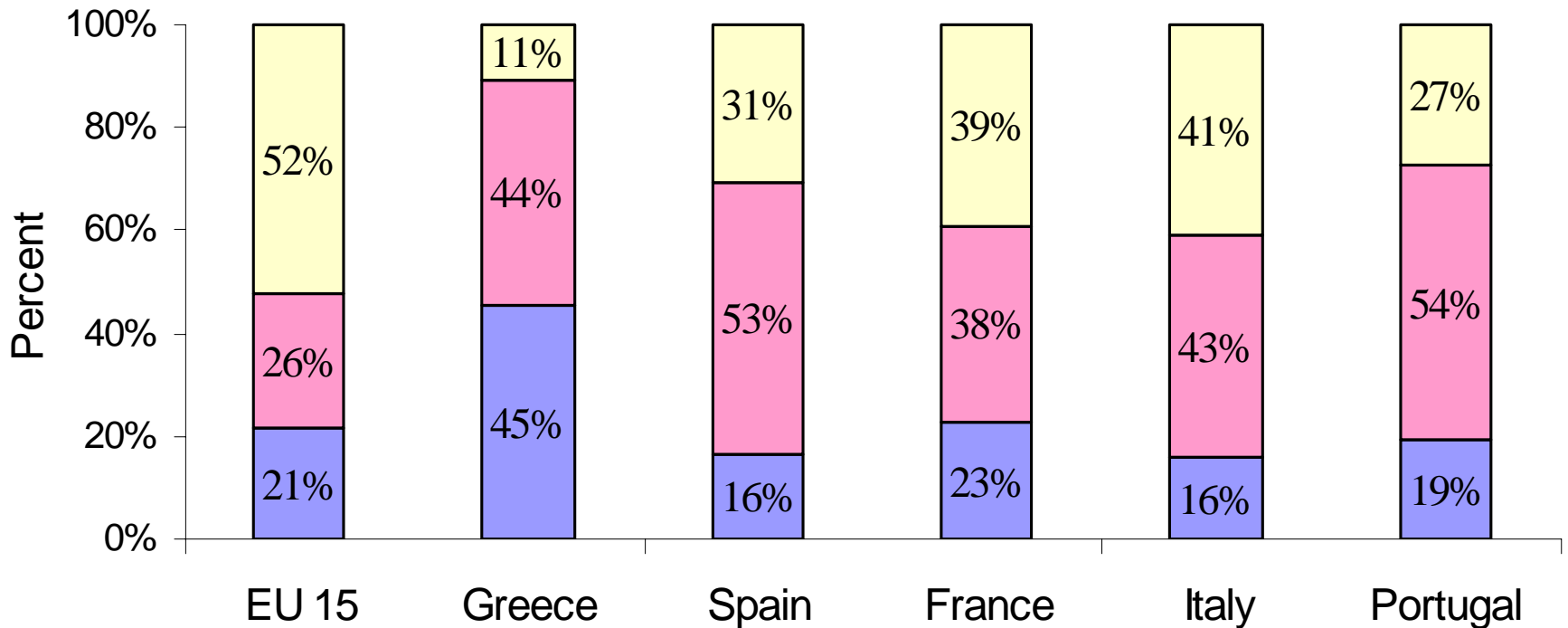
3a. Market Share in World Imports of Services



Source: National Central Banks, Eurostat, and IMF Balance of Payments. Statistics.

**Sunbelt countries specialize in less dynamic sectors (tourism) and have lost market share in the more dynamic (computer, insurance and financial services), though the latter less so in Portugal**

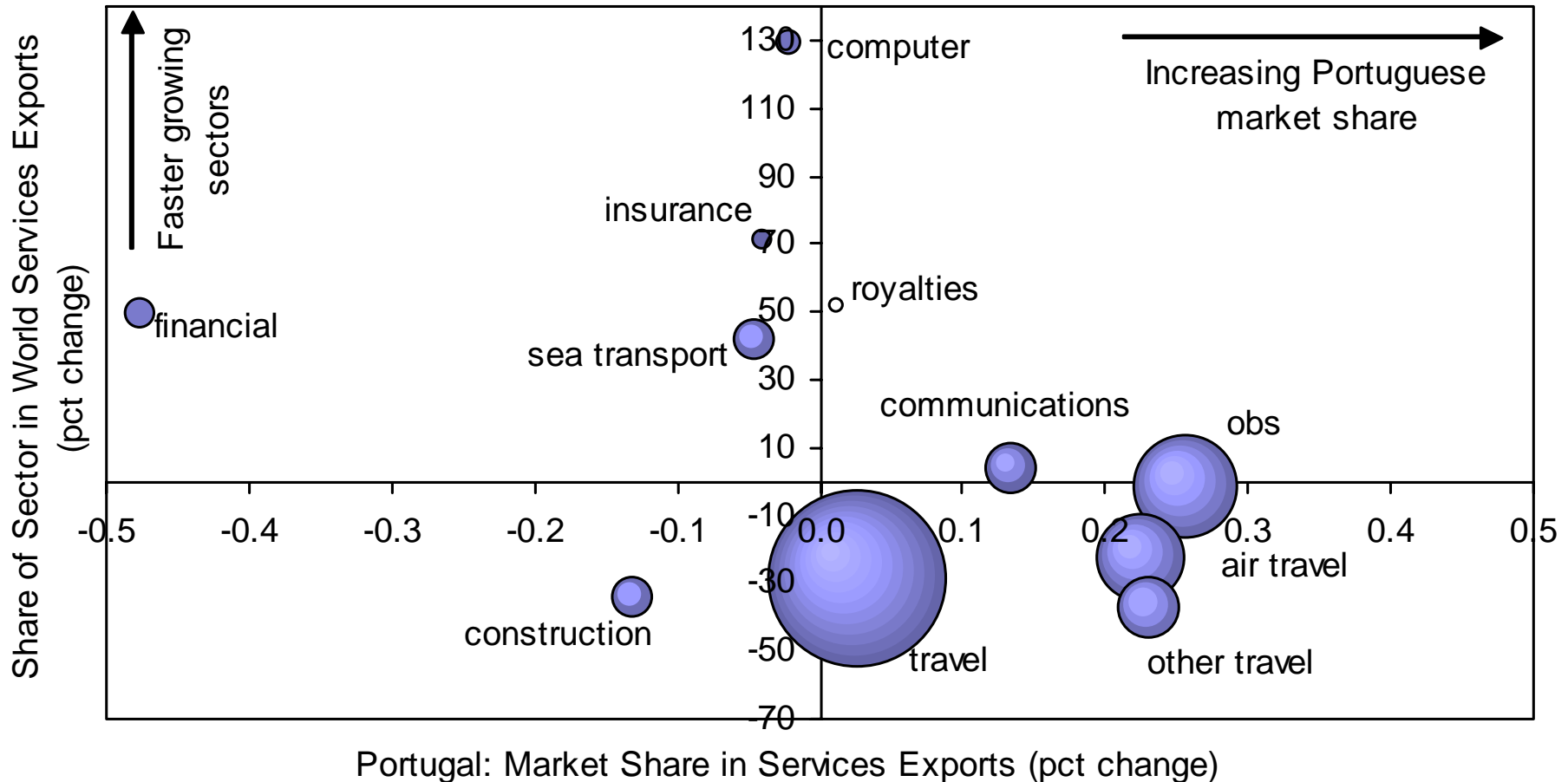
3b. Export of Services by Type : 2000-2006



Source: National Central Banks and Eurostat. ■ Transportation ■ Travel ■ Other Services  
Data for EU 15 and Greece excludes 2006

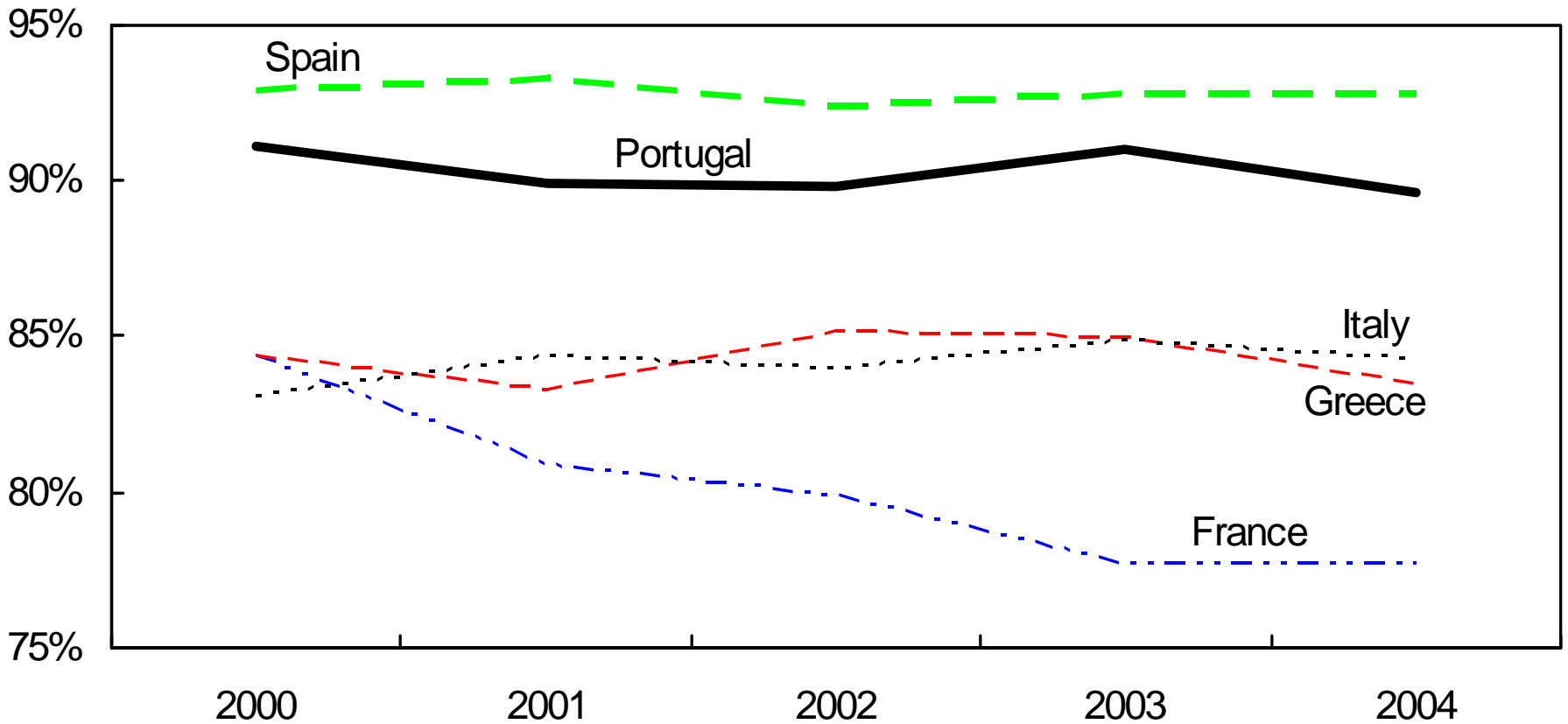
# Portugal has only increased market shares within low growth sectors, and then only marginally

## 3c. Specialization in Fast Growing Services Sectors



# Service exports to dynamic countries have not grown significantly

3d. Selected Countries: Services Exports to OECD  
(Share of total services exports)



Source: OECD, Trade in Services by Partner Country.

## Summary of Angle 3 - Has the sunbelt moved towards (higher quality) services?

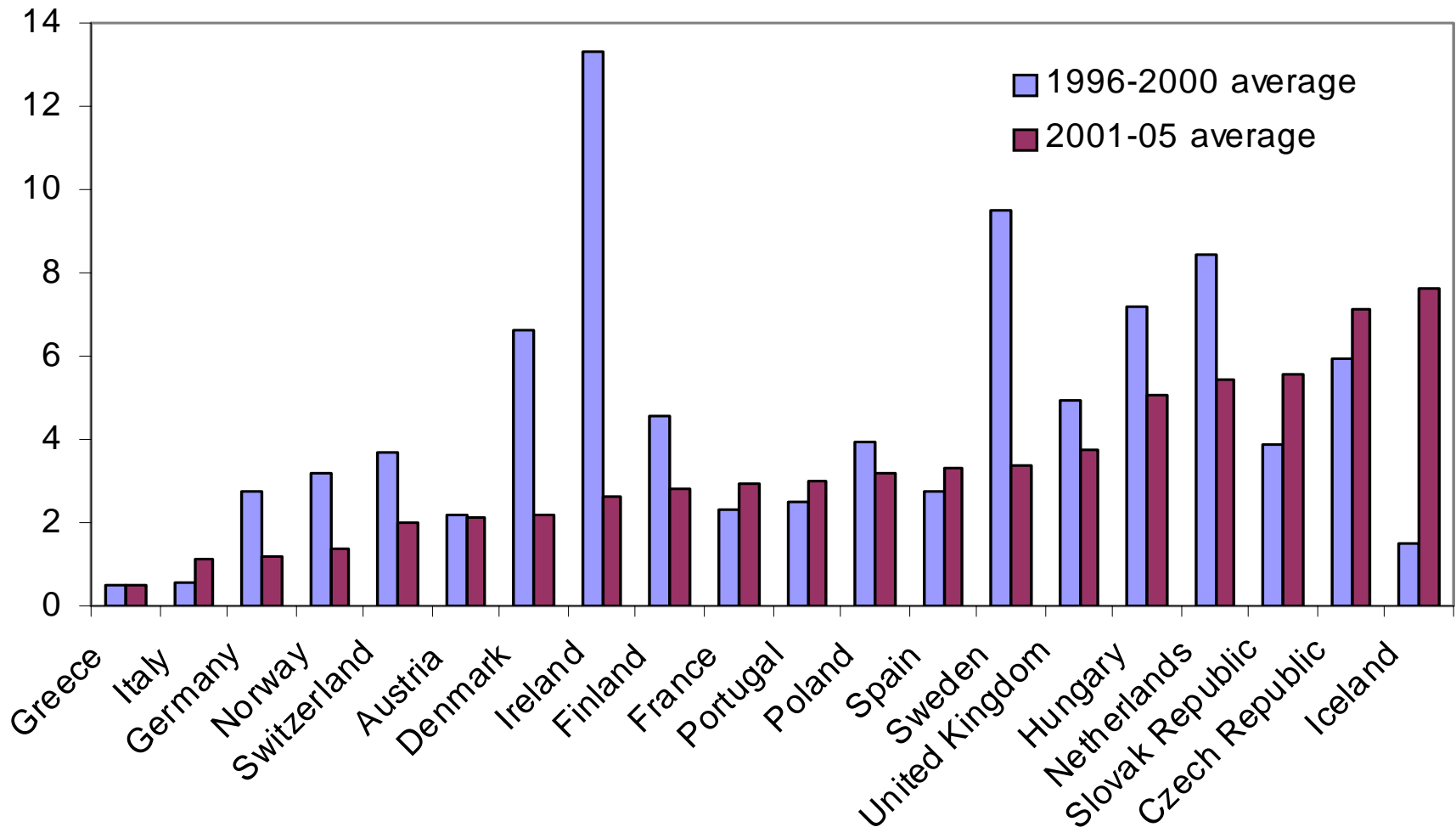
- Overall: negative – while some sunbelt countries (Spain, Greece) have, overall performance, including by Portugal, lagged Europe

## Angle 4

***Has Portugal been attracting FDI?***

**FDI has generally been increasing in the last 5 years and is about average for the OECD (except for Greece and Italy which are lower)**

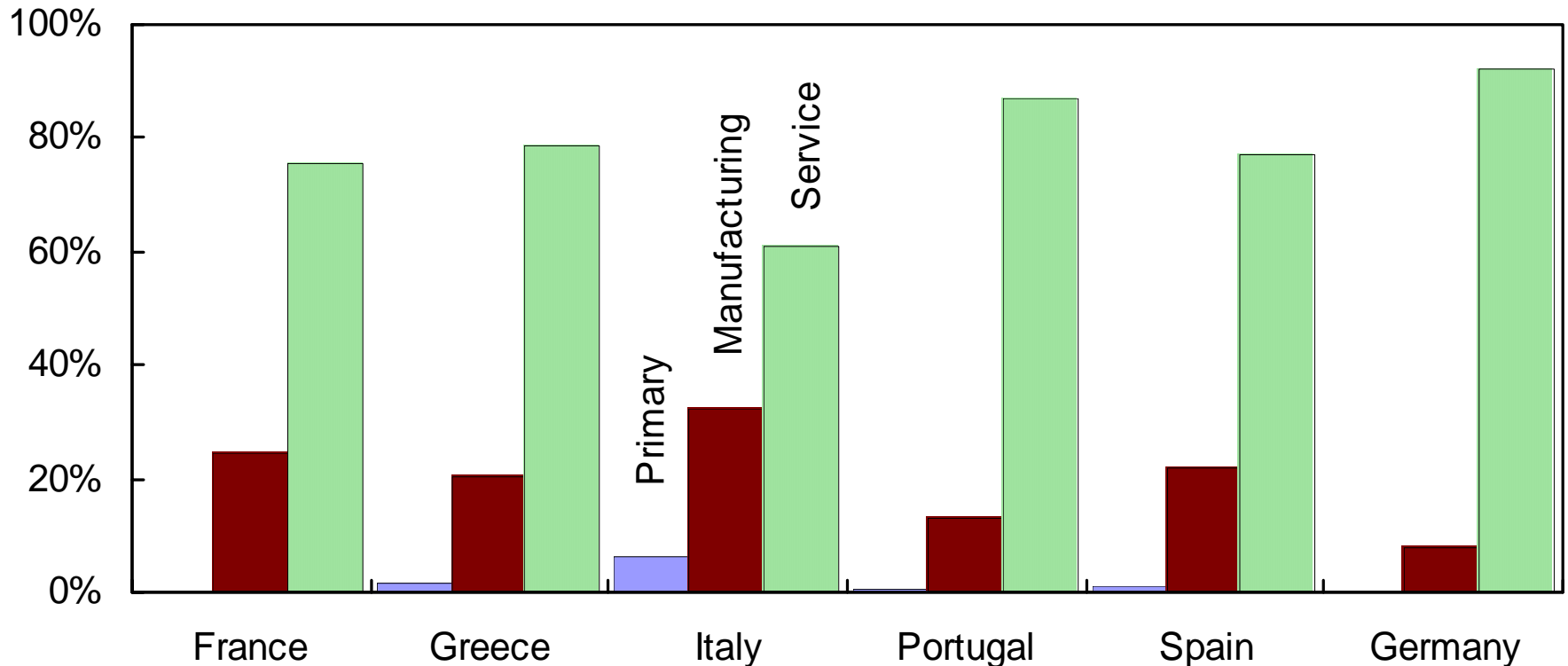
**4a. FDI Inflows as % of GDP**





# Manufacturing FDI was smaller for Portugal than other sunbelt countries

## 4b. Share of FDI Inflows

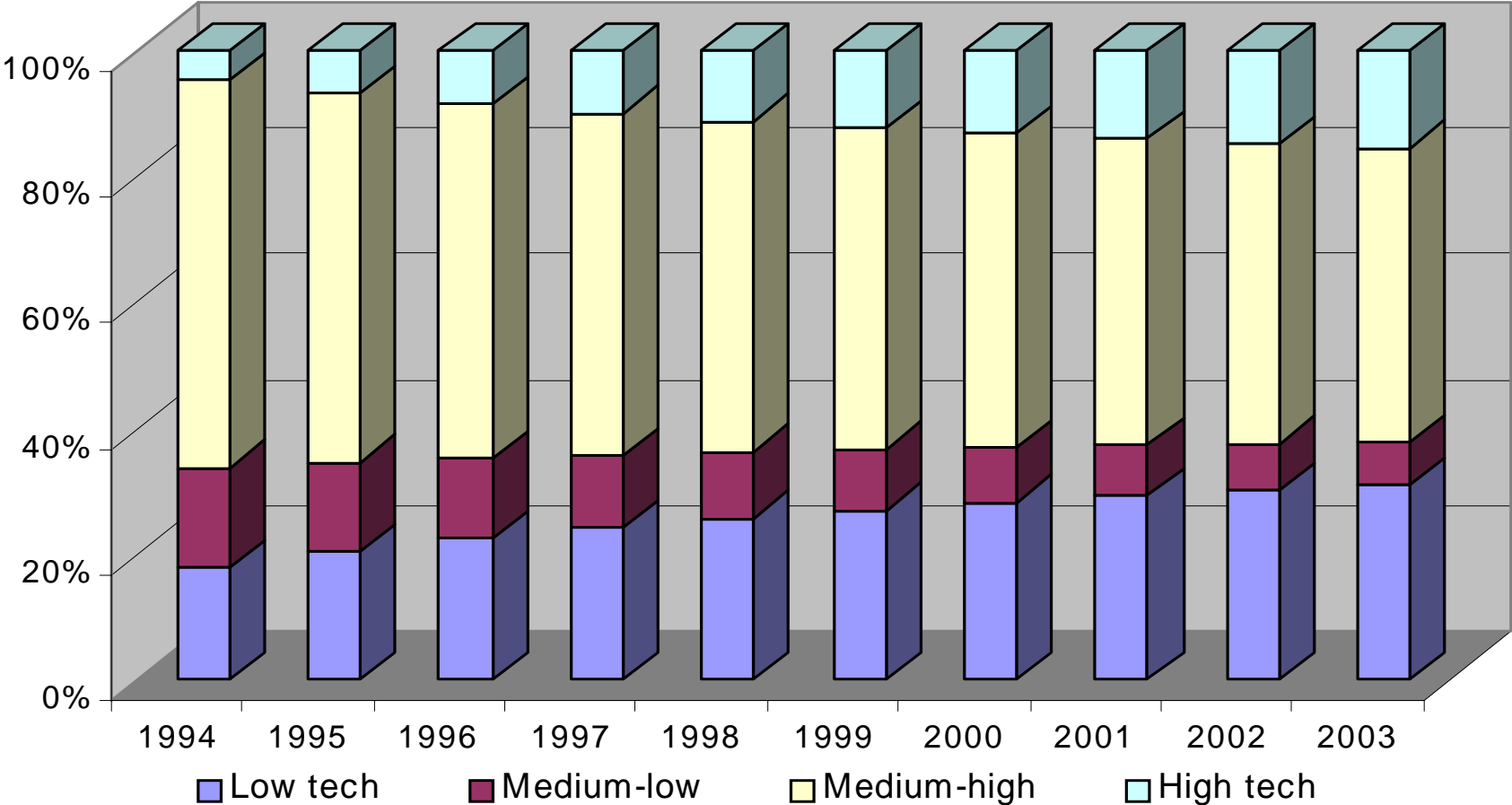


Note: The data are based on year 1996-05 for France, 2001-04 for Greece, 1996-04 for Italy, 1994-03 for Portugal, 1994-04 for Spain and 1996-05 for Germany.

Sources: OECD, UNCTAD, and national authorities.

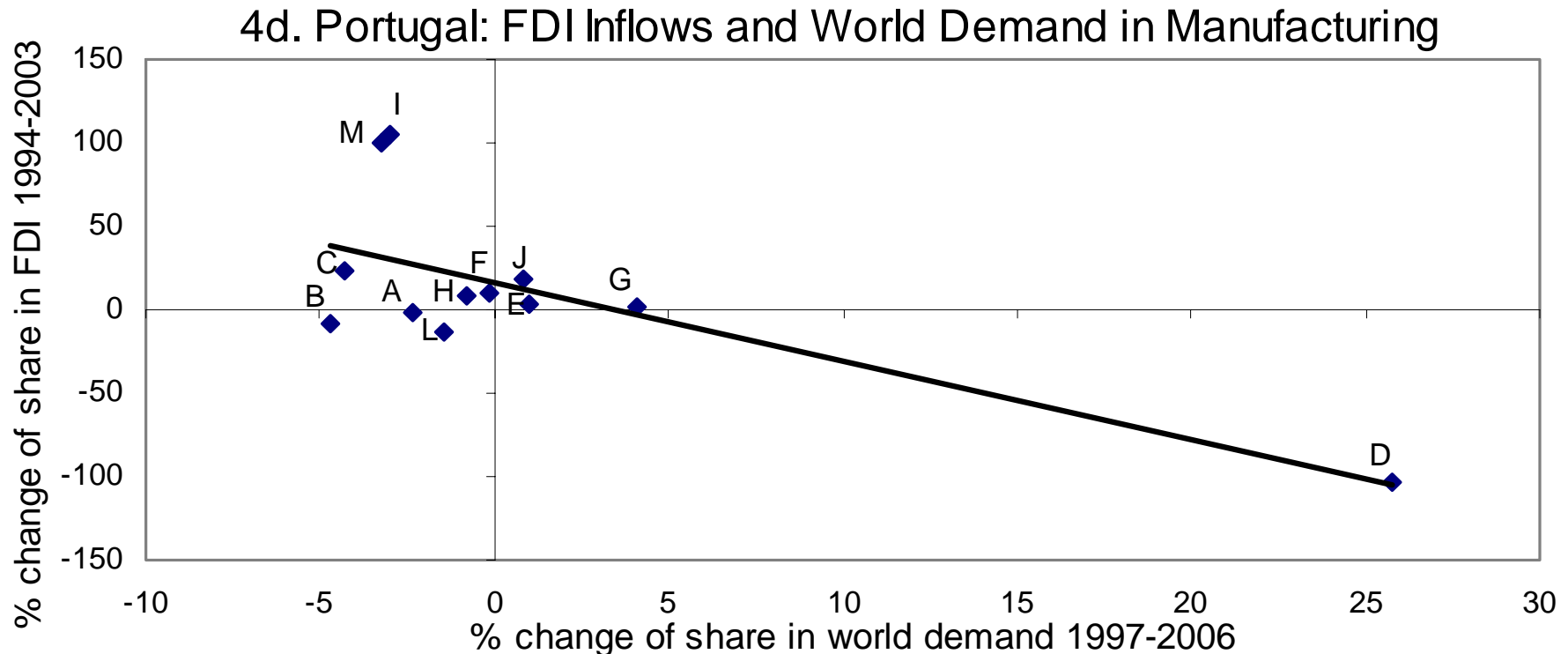
# Increasingly share of high tech FDI to Portugal, but overall no upgrading

4c: Portugal Technological Content of FDI Inflows in Manufacturing



Sources: OECD, UNCTAD, and national authorities.

# FDI has not been going into faster growing manufacturing sectors



Sources: OECD, UNCTAD, and national authorities.

Note: The sectors are: A=Food products; B=Textiles and Wearing apparel; C=Wood, publishing and printing; D=Refined petroleum & other treatments; E=Chemical products; F=Rubber & plastic products; H=Mechanical products; I=Office machinery and computers; J=Radio, TV, communication equipments; K=Medical, precision&optical instruments, watches&clocks; L=Motor vehicles; M=Other transport equip.

## Summary of Angle 4 - Has the sunbelt been attracting FDI?

- Overall: Slightly negative: need to attract more FDI and into more dynamic sectors

## Tentative Overall Summary

Portugal is rising to the challenge of globalization but from a difficult starting point and perhaps not as fast as others: quality and dynamism needs to improve