# Economics of European Integration Lecture # 6 Migration and Growth

Winter Semester 2013/14

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## Migration Facts and Theory

#### Immigration: Facts





Table 8.3 Net immigration before and after enlargements (thousands of people)

	Belgium	Denmark	Germany	Ireland	Greece	Spain	France	Italy
1997-2003	164	71	1146	193	302	2596	853	1197
2004-2007	202	42	237	245	162	2558	358	1753

	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	Total EU15
1997-2003	27	266	164	344	32	143	924	6522
2004-2007	12	-60	179	131	40	157	842	5557

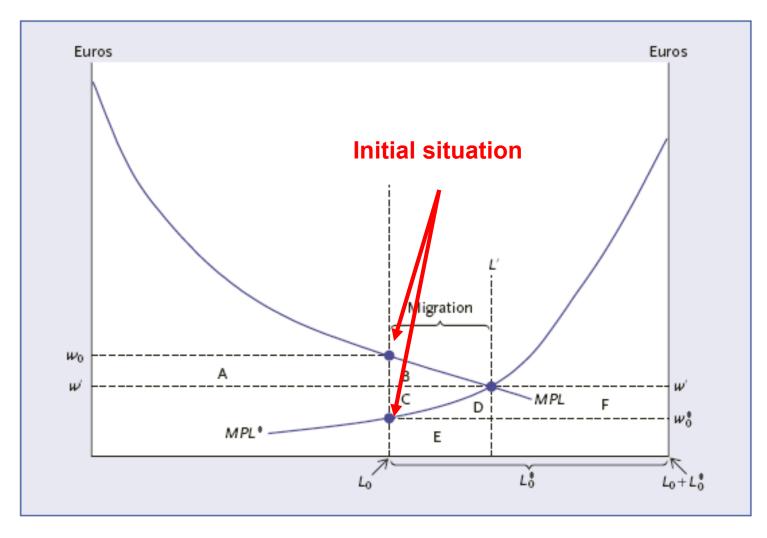
	Bulgaria	Czech Rep.	Estonia	Cyprus	Latvia	Lithuania	Hungary
1997-2003	-213	32	-14	41	-33	-96	97
2004-2007	-1	174	1	52	-5	-28	71

	Malta	Poland	Romania	Slovenia	Slovakia	Total EU12
1997-2003	17	<b>-497</b>	-592	18	-14	-186
2004-2007	7	-79	-23	29	17	262

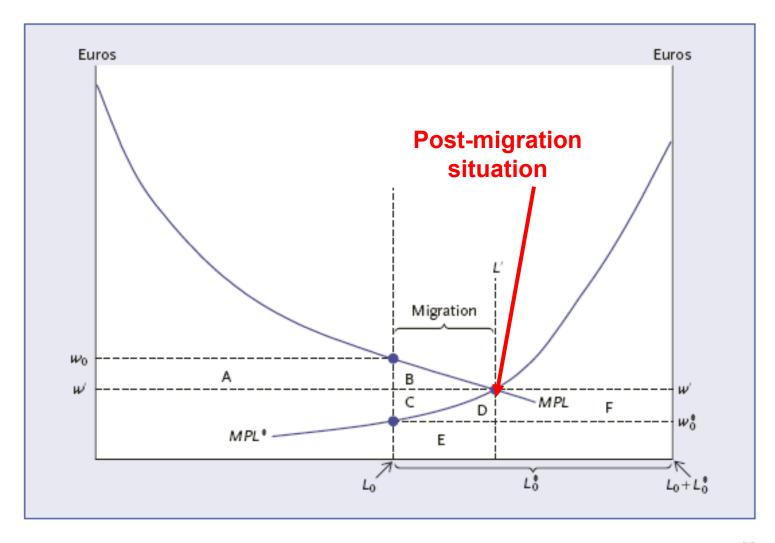
Note: A positive number indicates net immigration, a negative number signals net emigration.

Source: European Communities, 1995-2009

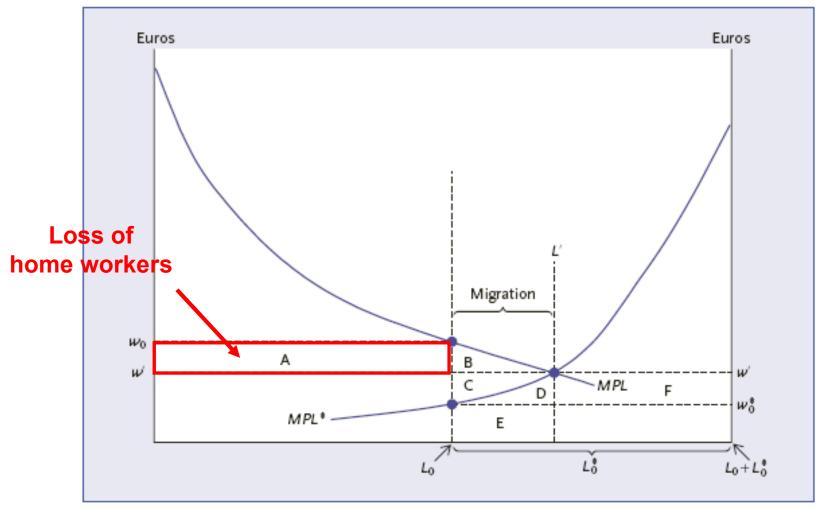




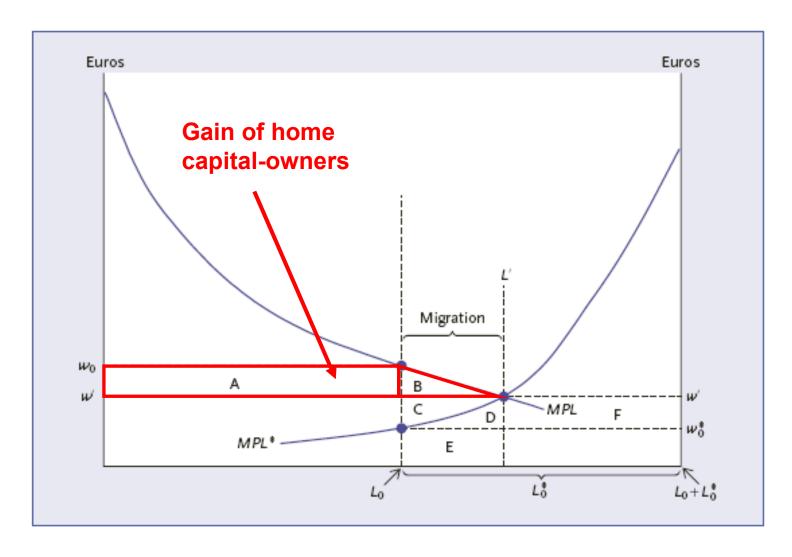




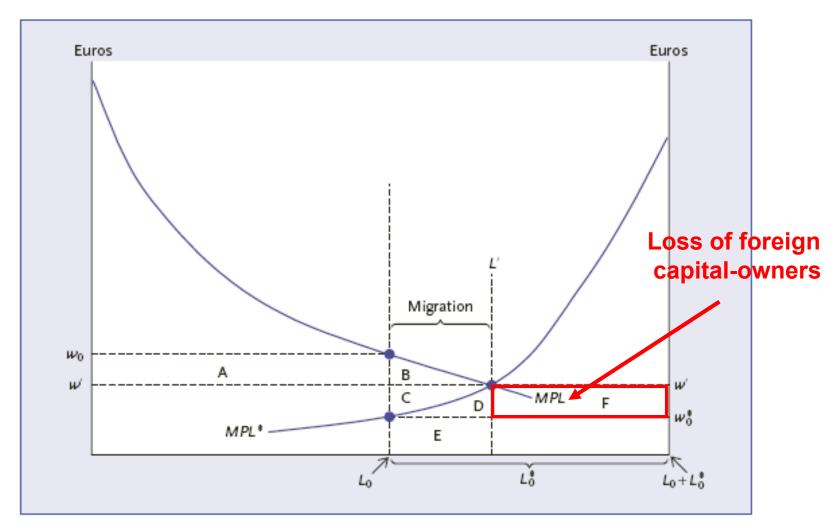




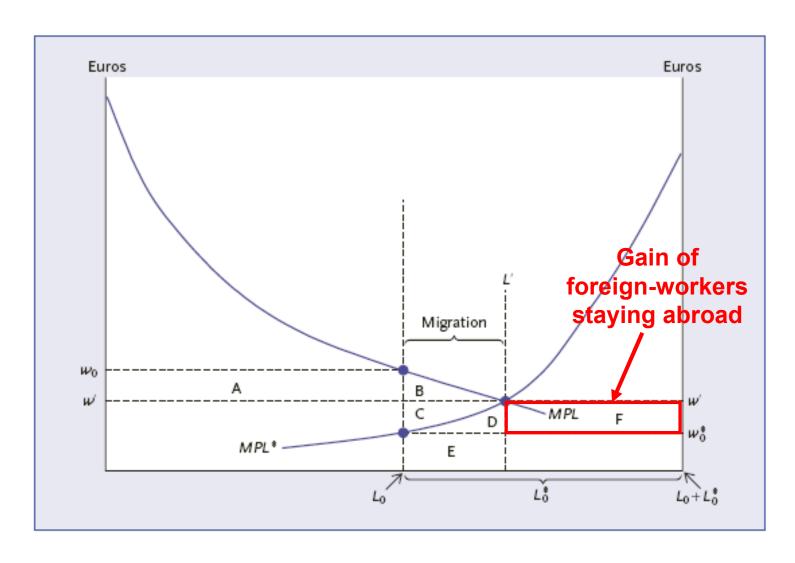




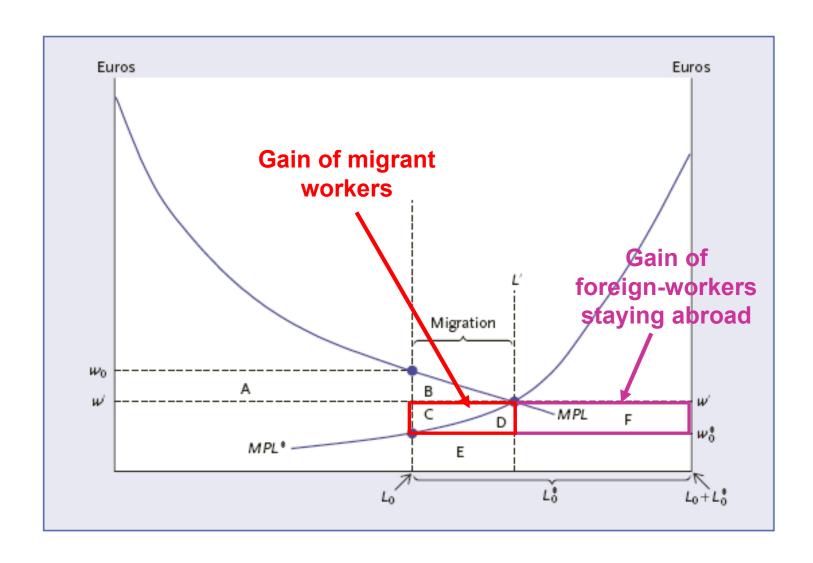




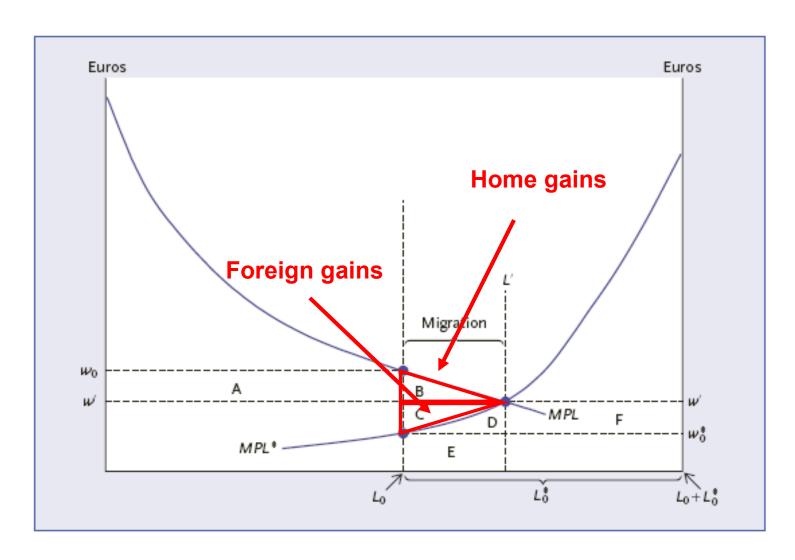












#### Complementarity vs Substitution



- Consideration: unskilled workers complements to skilled workers and capital
  - Complementarity of migrants and native factors of production provides a win-win situation
- Empirical findings inconclusive:
  - 1% rise in supply of migrant labour changes native wages by +/-1%
  - Increase or decrease of risk to *unemployment*, depending on type of workers, or no link



#### Immigration and skills





Table 8.4 Education level and skills of recent immigrant workers in the EU15 countries in 2005 (percentage of total)

Overall EU employed	lm	Immigrant workers from:		
	EU15	EU10	Outside EU	
27	15	15	36	
47	41	63	40	
26	44	22	23	
40	55	16	20	
26	24	28	25	
25	12	27	21	
10	9	30	35	
	27 47 26 40 26 25	27 15 47 41 26 44 40 55 26 24 25 12	EU15     EU10       27     15     15       47     41     63       26     44     22       40     55     16       26     24     28       25     12     27	

Source: Survey of the European Union, OECD, Sept 2007

#### Barriers to mobility



- Labour mobility in the EU as fundamental freedom of movement
- Low mobility within European Union
- Barriers to mobility:
  - Restrictions for new EU members' nationals mobility
  - Differing Pensions systems
  - Unemployment benefits
  - Regulated professions
  - Language, housing, health systems, etc.





### Chapter 7 **Growth Effects** & Factor Market Integration

#### **Growth Effects**





- European leaders have long emphasised the pro-growth aspects of European integration.
- These operate in a way that is fundamentally different from the way allocation effects operate;
- They operate by changing the rate at which new factors of production – mainly capital – are accumulated,
  - Hence the name 'accumulation effects'.



#### Logic of growth







- Nation's labour force can produce more goods and services year after year only if they have more/better 'tools' year after year.
  - tools' means capital broadly defined:
    - physical capital (machines, etc.),
    - human capital (skills, training, experience, etc.) and
    - knowledge capital (technology).

#### Logic of growth (cont.)



 Hence, rate of output growth is linked to rate of physical, human and knowledge capital accumulation.



- European integration affects growth mainly via its effect on investment in capital.
- Long-run growth involves a permanent change in the rate of accumulation.



#### Logic of growth: summary





- **European integration** (or any other policy)  $\rightarrow$  allocation effect  $\rightarrow$ improved efficiency → better investment climate → more investment in machines, skills and/or technology → higher output per person.
  - *Medium run* effects eventually fade out.
    - Growth returns to its long-run rate.
  - Long run effects raise long-run rate forever.

#### European Growth Phases, 1890-1992



Period	Real GDP	Real GDP per capita	Real GDP per hour
1890-1913	2.6	1.7	1.6
Belle époque			
1913-1950	1.4	1.0	1.9
<b>'2</b> nd <b>30 year</b>			
war'			
1950-1973	4.6	3.8	4.7
Golden era			
1973-1992	2.0	1.7	2.7
Productivity slowdown			
Whole Period			
1890-1992	2.5	1.9	2.6

#### Growth in the WWII Reconstruction Phase





	The Set-Back: (Pre-war year when GDP equalled that of 1945)	Back-on-Track Year (Year GDP attained highest pre-war level)	Reconstruction Growth (rate 1945 to col. 2 year)
Austria	1886	1951	15.2%
Belgium	Belgium 1924		6.0%
Denmark	1936	1946	13.5%
Finland	1938	1945	n.a.
France	1891	1949	19.0%
Germany	1908	1951	13.5%
Italy	1909	1950	11.2%
Netherlands	1912	1947	39.8%
Norway	1937	1946	9.7%
Sweden	These nation	ons arew duri	na WWII

Switzerland

UK

#### Selected countries facts





GDP per capita & Rankings, 1950 and 1973 (1990 international dollars).

	1950 GDP (1990 \$)	Europea n Rank 1950	Change in Rank 1950-1973	GDP Growth Rate
EEC	4,825	8.0	+ 1.2	4.2
average				
EFTA	6,835	3.6	-1.4	3.0
average				
France	5,221	7	+ 2	4.0
Germany	4,281	9	+ 5	5.0
Italy	3,425	13	+ 2	4.9
UK	6,847	2	-5	2.4

#### Statistical evidence





Recent evidence shows sizeable medium-run effect of integration

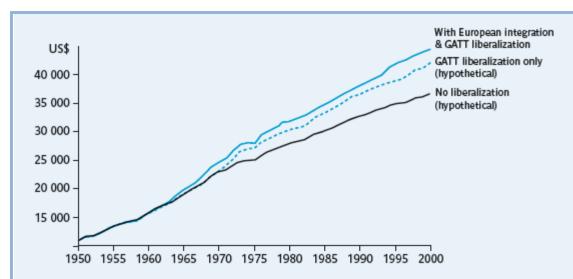


Figure 7.1 Empirical evidence on the medium-run growth effect

Note: The top line shows EU income growth. The middle and lower lines show a simulation of how much lower EU income per worker would have been under two hypothetical situations, without European integration (middle) and without any integration (lower). The difference between the middle and top line is Badinger's estimate of the medium-run growth effect.

Source: Badinger 2005, working paper version, with permission from the author



## Medium run growth effects Solow analysis

#### Solow diagram



Shows medium run growth effects in simple diagram.

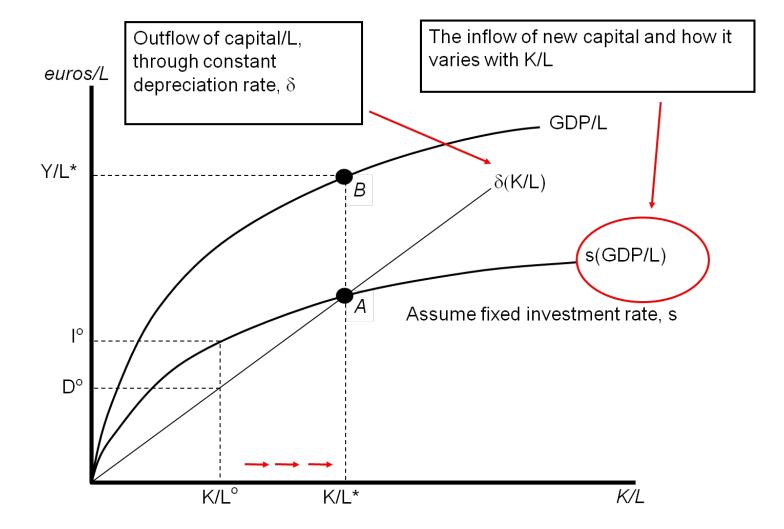
- To simplify, start with:
  - whole EU as a single, closed economy
  - with fully integrated capital and labour markets and
  - the same technology everywhere.



#### Solow diagram

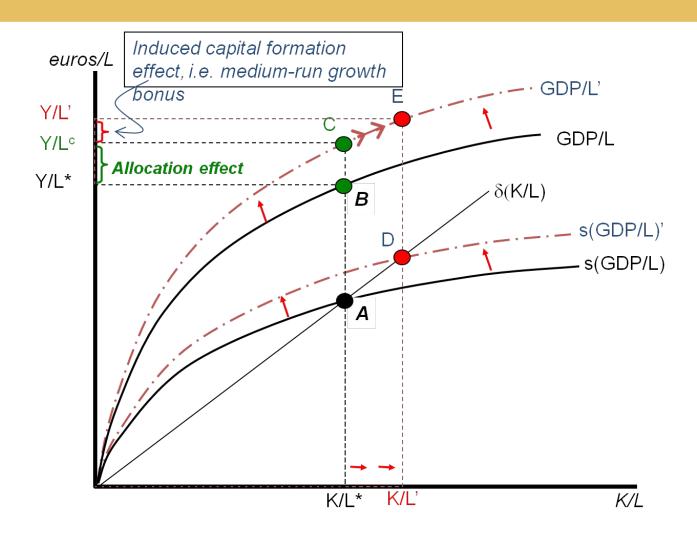




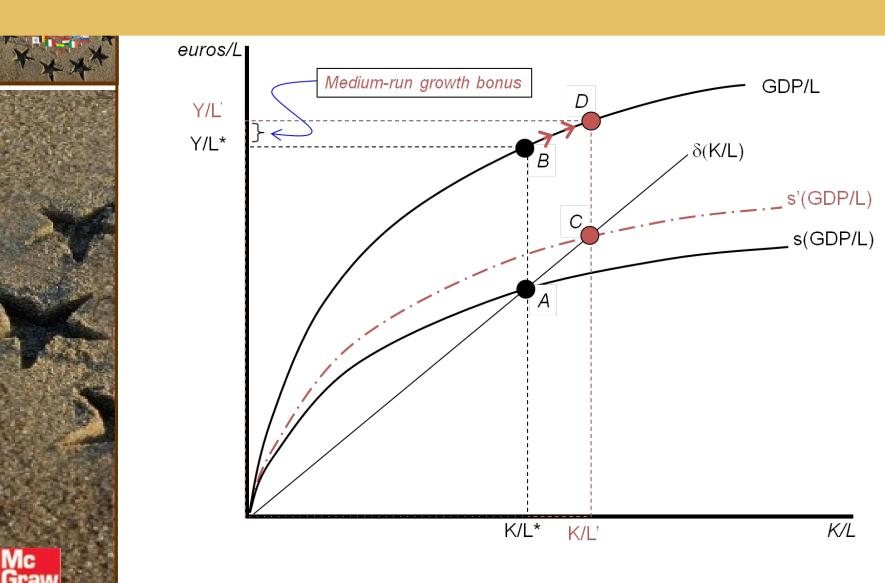


#### Medium-run growth bonus from integration



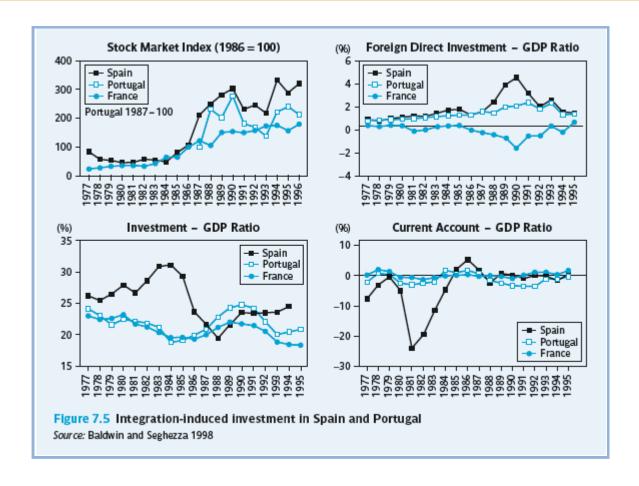


#### Integration induced investment rate rise



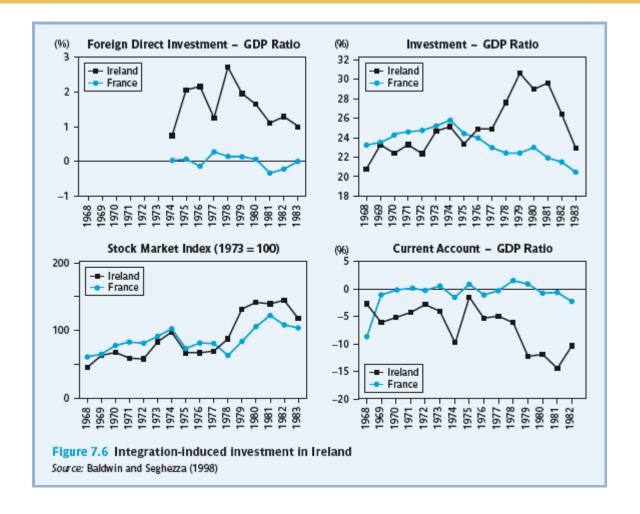
#### The Experience of Spain & Portugal





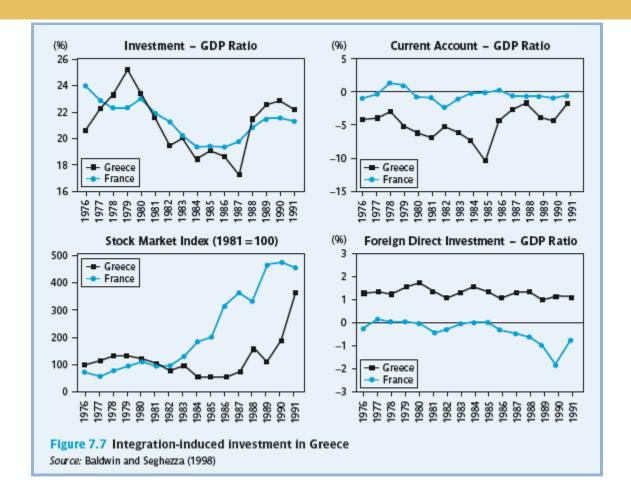
#### The Experience of Ireland





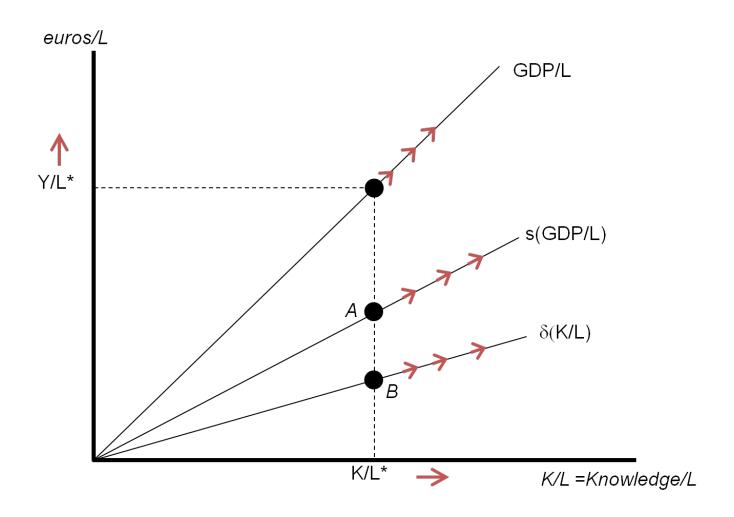
#### The Experience of Greece





#### Long-term growth in Solow-like diagram





#### Long term growth through integration





 Integration improves efficiency → improves investment climate → higher investment rate (s rises to s') → faster growth (knowledge capital accumulates more rapidly)

#### Long-term growth in practice



- Empirical evidence for long term growth hard to find
  - Return to pre-Golden age levels
  - Hence: emphasis of focus on medium term growth
- Growth to be tested in the case of new member states

#### Long-term growth impact of integration



