

PhD in Economics

"BUSINESS CYCLE IN THE
CATALAN MANUFACTURING INDUSTRY
(1983-1995):

Microeconomic convergence with Europe
and influence of the monetary policy in the enterprises'
profitability, according to the E.U. database BACH"

Departament de Teoria Econòmica
Universitat de Barcelona

PhD Director: Dr. Joan Hortalà i Arau

Acknowledgements
(for the database BACH):

Dr. Enric Genescà i Garrigosa
Dra. Teresa Obis i Artal

Departament d'Economia de l'Empresa
Universitat Autònoma de Barcelona

CHAPTER 1.

There has been done a survey about the business cycle and the relationships which have been defined between the business cycle, the profitability of enterprises and the monetary policy (with an extension for the exchange rate). Enterprises' profitability is clearly procyclical, interest rate and enterprises profitability are negatively related (and also with the business cycle), exchange rate is a transmission business cycle mechanism at a international level and, finally, industrial prices are not clearly inflationists.

CHAPTER 2.

There are presented the two database used in this work: The first one, coming from the Spanish Central Bank, with the separated information for the Catalan enterprises (Generalitat de Catalunya, Catalonia's government, publishes yearly since 1983 a report of the results for this aggregation of the Catalan enterprises, in cooperation with the Autonomous University of Barcelona). And the second one, the European Union database BACH ("Bank for the Accounts of Companies Harmonised"), which homologues the financial aggregated accounts of the enterprises of different countries, collected yearly by the European Central Banks. Thus, it is possible to make comparison between countries.

It has been done the adaptation of the Catalan financial aggregated accounts to the BACH's formats. And it is also analysed the ratios of profitability, return on assets and financial structure in the Catalan manufacturing industry in the period 1983-1995 (including comparisons with European enterprises). Finally, it has been studied the microeconomic convergence (measured by the profitability of enterprises) for the European manufacturing industry.

CHAPTER 3.

It is presented the theoretical model used for the empirical analysis. Due to this information referred to the net operating assets profitability of the different European manufacturing industries considered (information which is disposable for thirteen years and five European manufacturing industries: Germany, France, Italy, Catalonia and rest of Spain), it is tried to quantify the influence that some economic variables could have had over it.

According to the model, it has been considered as profitability's explicative variables the manufacturing production, the industrial prices (the output and the raw materials ones), the interest rate and the exchange rate. The different econometric equations have been estimated considering an initial multiplicative dummies variables model.

The results obtained allow to establish a positive relationship between industrial production and profitability, and a neutral effect of the industrial prices on it (both results are homogeneous in the European manufacturing industries). It is also established a significant influence of the raw materials prices, only significant in the German profitability. And, finally, it has been calculated a negative relationship between the interest rate and the exchange rate (appreciation) and the manufacturing profitability (both with significant, different effects between the Catalan manufacturing industry and the rest of Spain manufacturing industry). The Spanish monetary policy of the considered period has had a different (and significant) impact in Catalonia, in front of the rest of Spain. Thus, the high interest rate and the peseta's appreciation of the period 1988-1993 would have damaged most – double impact- the Catalan manufacturing profitability than the Spanish one. And the low interest rate and peseta's depreciation of the period 1994-1995 would have benefited most –also double impact- the Catalan manufacturing profitability than the Spanish one.