

# THE ROLE OF CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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- Monetary policy.
- Financial stability.
- Banking structure.
- Finance and growth.



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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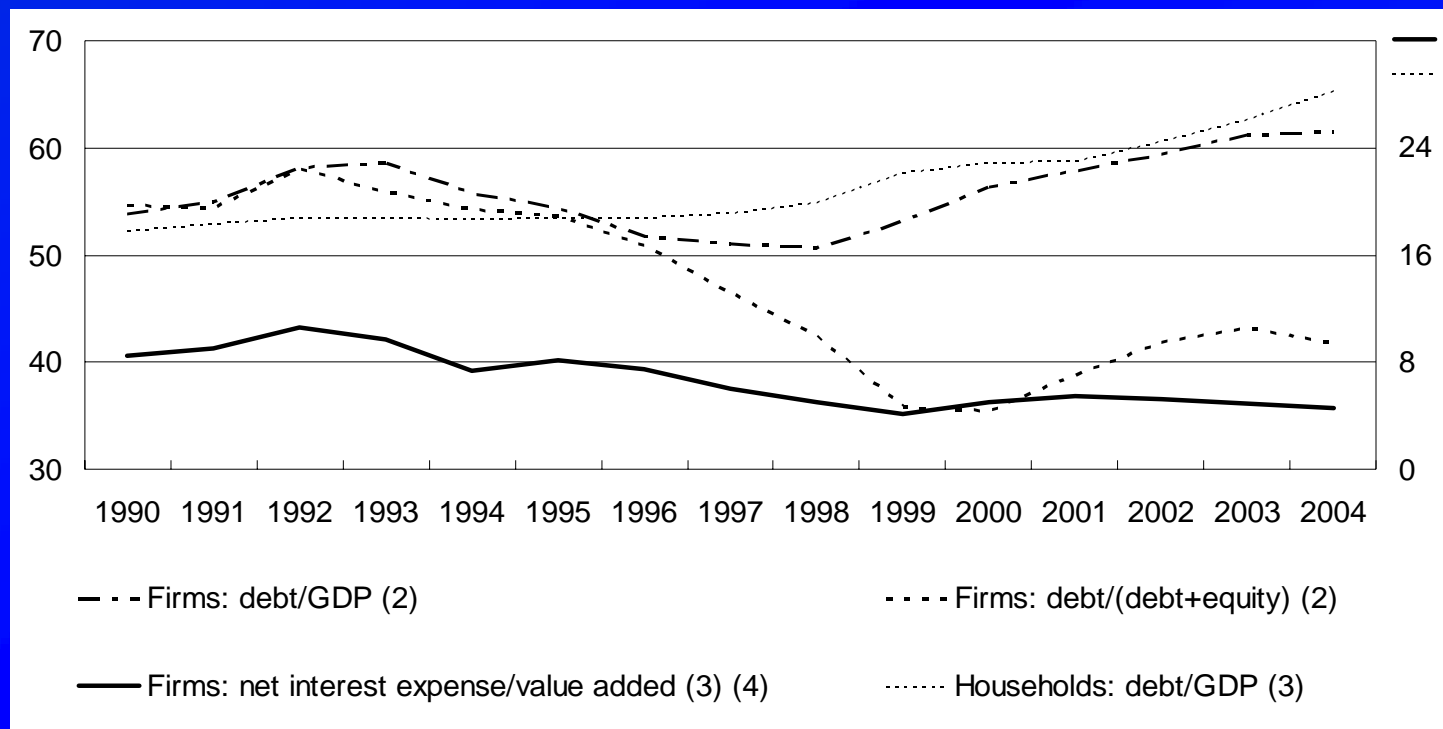
The data (1):

- Aggregate data: national accounts for profitability and investment, financial accounts for financial structure.
- Frequency: quarterly, with a two-months lag.
- Advantages: relatively long time-series, easily comparable across countries.
- Drawbacks: not very detailed, not useful for composition effects.



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

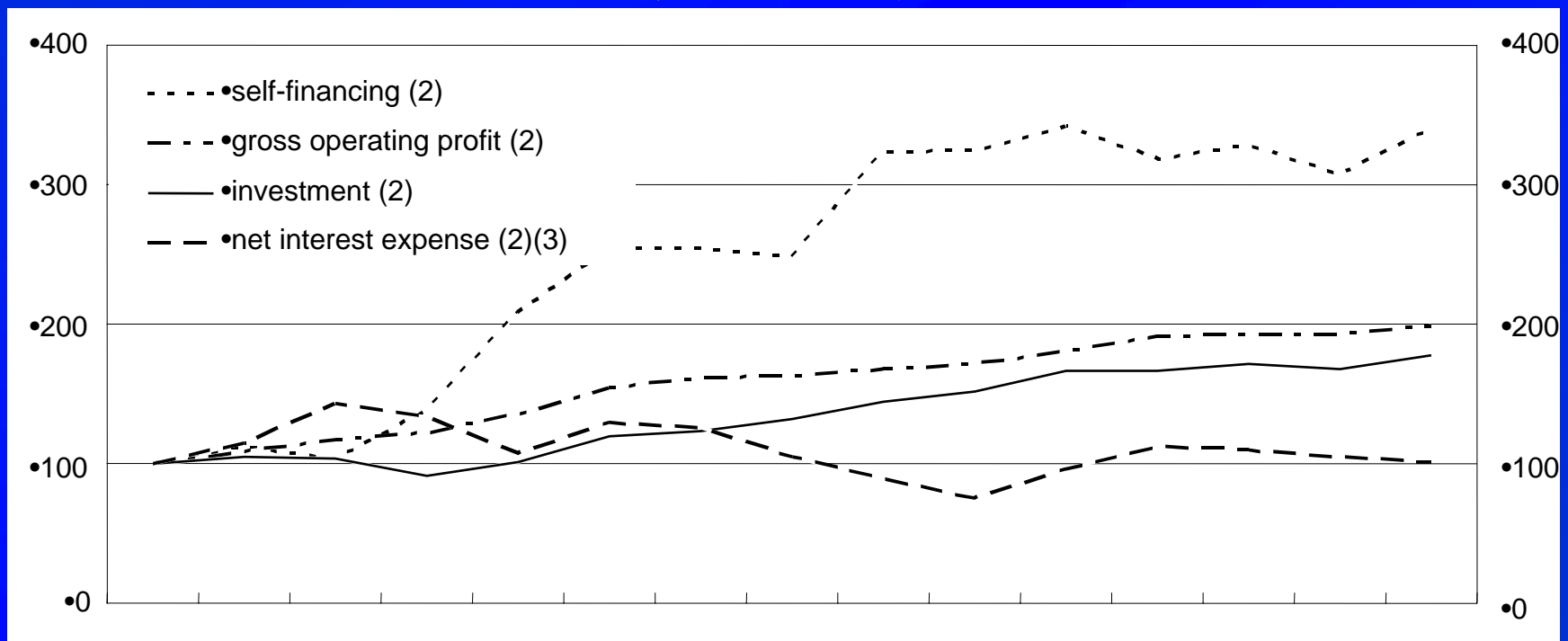
## THE FINANCIAL DEBT OF ITALIAN HOUSEHOLDS AND NON-FINANCIAL FIRMS (annual data)



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

## THE EXTERNAL FUNDING REQUIREMENT OF ITALIAN NON-FINANCIAL FIRMS

*(annual data)*



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (2):

- Firm-level data: balance sheets and profit statements for a sample of around 80 listed firms (Datastream).
- Frequency: quarterly, with a one-to-two months lag.
- Advantages: more details, allows sectoral analysis.
- Drawbacks: accounting issues, questions about the sample representativity in a country where most firms are unlisted SMEs – and even large ones are unlisted.



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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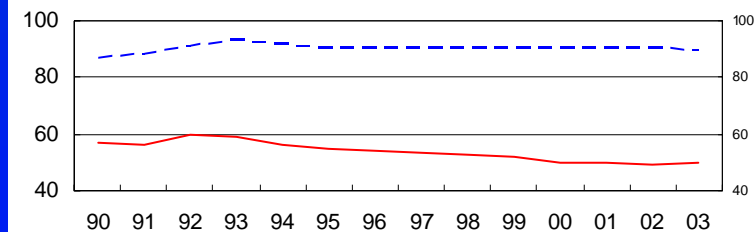
The data (3):

- Firm-level data: balance sheets and profit statements for a sample of 45.000 corporations (Centrale dei bilanci).
- Frequency: yearly, with a 15-months lag.
- Advantages: in-depth analysis of firms' investment and financial decisions, by sector – size – region.
- Drawbacks: low frequency and lags make this dataset useful mostly for structural analysis.

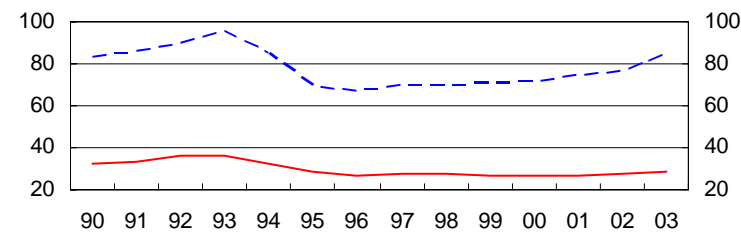


# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

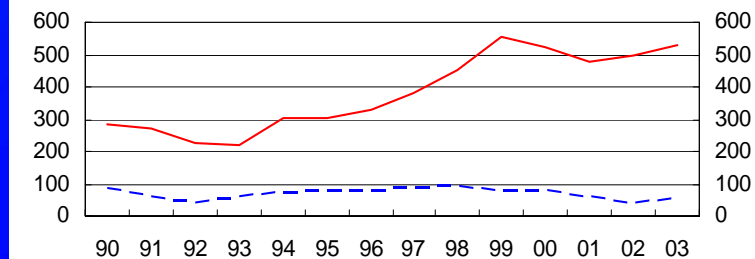
**leverage**



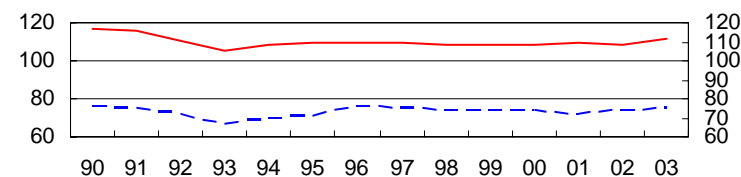
**debt / sales**



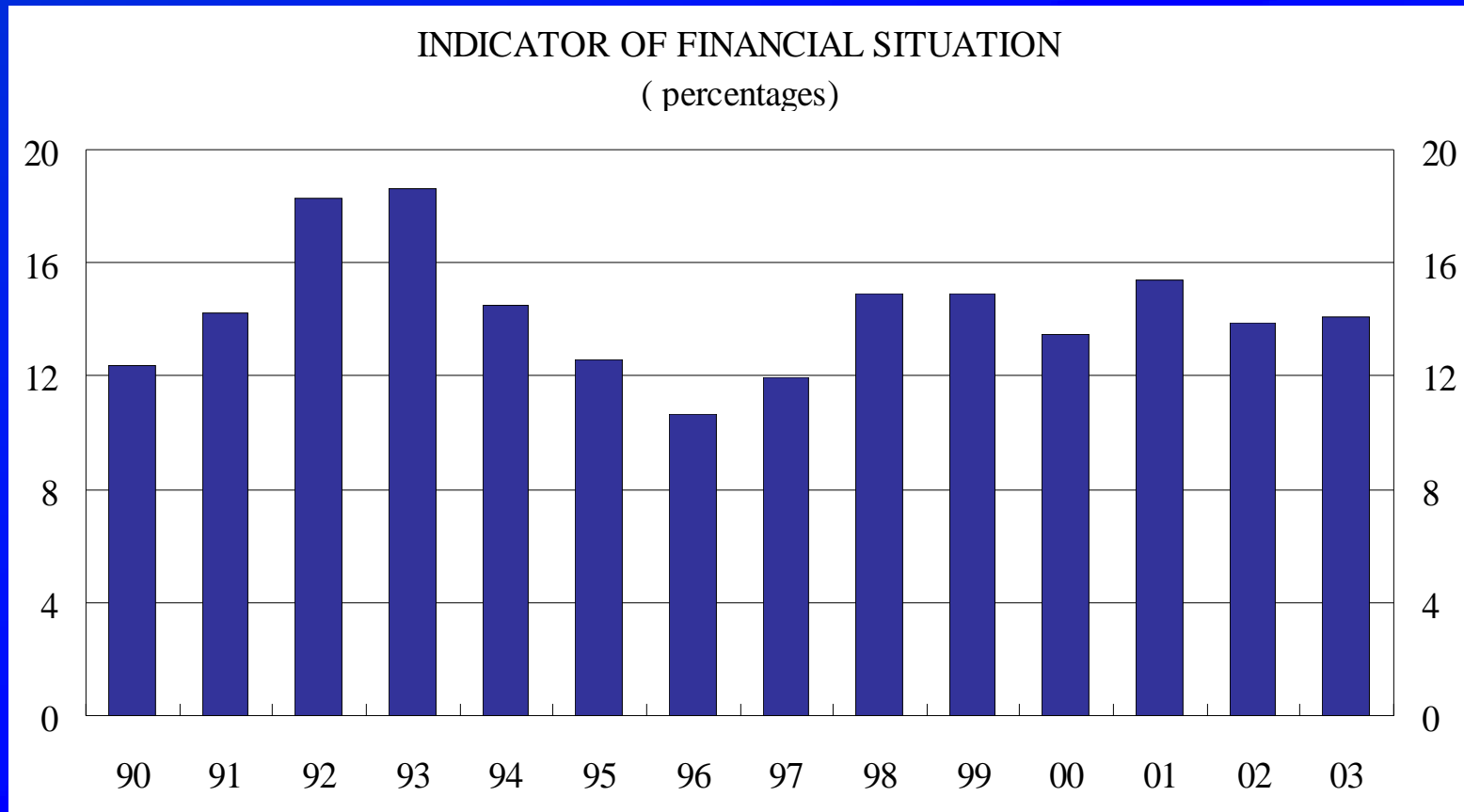
**cash flow / interest expenses**



**current assets / current liabilities**



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (4):

- Credit relationships for a sample of 35.000 firms, matched with their balance sheets (Centrale dei rischi).
- Frequency: quarterly, with a two-months lag.
- Advantages: allows detailed analysis of credit flows, pricing within bank-firm relationships – important for a bank-centered system.
- Drawbacks: changes in the definition of variables shorten the time-series.



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (5):

- Phone survey on firms' expectations: conducted in September, qualitative information on profitability, investment and financial structure; firms with 20 or more employees, industry and service sectors.
- In-depth yearly survey on firms' governance structure and on their investment, financial and labor strategies, with the possibility of adding specific questions on issues with current relevance (e.g. the impact of exchange rates on exports, of changes in fiscal policy on investment etc.).



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (6):

- Commercial databases for IPOs, SEOs, M&As, bond placements, syndicated loans, venture capital funding (only aggregate data), etc.
- These data allow to follow closely the activity of firms on the main financial markets for most countries.
- Drawbacks: due to their commercial purpose, the databases don't always lend themselves easily to economic analysis (e.g. it's hard to link firms across different sources).



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

## Mergers and Acquisitions in the Main Industrialized Countries

	1990-1995			1996-2001			2002-2005		
	Number	Value		Number	Value		Number	Value	
		billion USD	% of GDP		billion USD	% of GDP		Billion USD	% of GDP
Australia	628	29.5	1.5	1,329	80.4	3.5	1,543	84.2	3.8
Belgium	251	7.1	0.5	351	57.3	3.9	169	28.7	2.3
Canada	1,421	41.6	1.2	2,755	275.1	6.9	1,858	131.1	3.5
France	1,663	81.9	1.0	1,552	269.2	3.2	785	191.1	2.6
Germany	1,913	37.3	0.3	3,019	413.5	3.3	1,154	98.9	1.0
Italy	852	55.0	0.8	1,012	197.8	2.8	666	87.2	1.4
Japan	216	56.1	0.2	2,266	231.9	0.9	3,399	208.2	1.2
Netherlands	565	25.6	1.3	622	127.1	5.4	339	30.1	1.4
Spain	510	25.6	0.8	1,020	78.0	2.2	745	54.4	1.5
Sweden	473	33.8	2.4	767	111.8	7.6	424	28.3	2.3
Switzerland	412	14.6	1.0	480	82.1	5.1	256	19.2	1.5
United Kingdom	2,349	170.9	2.7	4,304	798.1	9.6	2,123	407.7	5.3
United States	8,743	811.2	2.1	13,771	5,005.7	9.3	7,118	1,696.5	3.7
industrialized countries	19,996	1,390.2	1.3	33,248	7,728.1	5.8	20,579	3,065.7	2.8
Euro area	6,767	256.0	0.7	9,545	1,248.1	3.2	4,860	544.4	1.6
Total - all countries	26,062	1,570.3		49,119	8,500.4		34,767.0	3,598.0	



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (7):

- Banks' balance sheets and profit statements, plus all supervisory records (Matrice dei conti).
- Frequency: depending on the data, from semi-annual to monthly with a two-months lag.
- Advantages: allows to monitor closely most aspects of banks' activity.
- Drawbacks: not very flexible when new information is needed (e.g. the use of derivatives).



# CORPORATE FINANCE ANALYSIS IN CENTRAL BANKING

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The data (8):

- International data: national and financial accounts, sample of listed corporations, databases on corporate finance transactions, for Europe sample of mainly unlisted companies (Amadeus).
- Advantages: wealth of information.
- Drawbacks: differences in institutions and accounting rules complicate the interpretation of comparisons.



# CORPORATE FINANCE AND MONETARY POLICY

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The theory:

- Financial constraints and investment: changes in monetary policy affect firms' investment policy differently according to whether they are constrained or not.
- Bank lending channel: an increase in interest rates reduces credit supply and affects bank-dependent firms; more in general, financial accelerator effects related to the wedge between the costs of internal and external funding.
- Bottom line: composition effects and non-linearities in the transmission of monetary policy to firms.



# CORPORATE FINANCE AND MONETARY POLICY

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## Internal reports:

- Financial accounts: 3 times a year, analysis centered on changes in the aggregate financial structure of the non-financial corporate sector.
- Listed firms: 3 times a year, focus on the relationship between profitability, investment and financial structure; comparison with the euro area average, sectoral analysis.



# CORPORATE FINANCE AND MONETARY POLICY

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## Publications:

- Annual Report: published at the end of May, end-of-year situation, focus on aggregate data, details on corporate finance figures, use of surveys.
- Economic Bulletin: published in November and March, summary of the latest trends, in some issues box on topics of interest.



# CORPORATE FINANCE AND MONETARY POLICY

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## Research (1):

- Transmission of monetary policy: Gaiotti-Secchi JMCB 2006, Is There a Cost Channel of Monetary Policy Transmission? Dedola-Lippi EER 2005, The Monetary Transmission Mechanism: Evidence from the Industries of 5 OECD Countries.
- Monetary policy and investment: Gaiotti-Generale ECB WP 2001, Does Monetary Policy Have Asymmetric Effects? A Look at the Investment Behaviour of Italian Firms.



# CORPORATE FINANCE AND MONETARY POLICY

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## Research (2):

- The bank lending channel: Gambacorta EER 2005, Inside the Bank Lending Channel; Chiades-Gambacorta GER 2004, The Bernanke-Blinder Model in an Open Economy: The Italian case; Gambacorta 2002, The Italian Banking System and Monetary Transmission: Evidence from Bank Level Data, in *Monetary Policy Transmission in the Euro Area*, CUP.



# CORPORATE FINANCE AND FINANCIAL STABILITY

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The theory:

- The financial conditions of the corporate sector affect the health of the financial system.
- Some large firms can single-handedly cause a financial crisis if they fail.
- More importantly, non-financial corporations can experience a systemic shock that then propagates to the financial system.



# CORPORATE FINANCE AND FINANCIAL STABILITY

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## Internal reports (1):

- Listed firms: focus on debt sustainability, its maturity, firms' liquidity.
- Unlisted firms: combination of indicators of financial structure, assets and liability matching, debt servicing.
- M&As: relationship with cash financing and debt dynamics of large firms, cross-country vs. domestic, cross-industry vs. same-industry deals.



# CORPORATE FINANCE AND FINANCIAL STABILITY

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## Internal reports (2):

- Probabilities of default estimated for a sample of 450.000 firms and linked to individual banks' loan portfolios.
- Stress tests of these probabilities and their effects on banks' capital adequacy – both at the individual and financial system level.
- Monitoring of the sectoral concentration of banks' loan portfolios taking into account cross-industry default correlations.



# CORPORATE FINANCE AND FINANCIAL STABILITY

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## Internal reports (3):

- Firm-specific events: close cooperation with the Banking Supervision Department when a large firm gets into trouble (e.g. Parmalat).
- Systemic events: reports on the effect of the rise of oil prices on firms' profitability and financial structure, on significant movements in stock and bond markets, on specific aspects of financial innovation and how it affects firms' funding.



# CORPORATE FINANCE AND FINANCIAL STABILITY

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## Research:

- Bank-firm relationships: Bonaccorsi di Patti-Gobbi JF 2006, Winners or Losers? The Impact of Bank Consolidation on Corporate Borrowers; Bonaccorsi di Patti-Dell'Araccia JMCB 2004, Bank Competition and Firm Creation.
- Contagion: Corsetti-Pericoli-Sbraccia JIMF 2005, Some Contagion, Some Interdependence: More Pitfalls in tests of Financial Contagion.



# CORPORATE FINANCE AND BANKING STRUCTURE

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## Internal reports:

- Monthly report on trends in interest rates, loans and deposits.
- Semi-annual report by the Banking Supervision Department on trends in risk, profitability and capital adequacy of the banking industry.

## Publications:

- Annual Report and Economic Bulletin: structural and trend analysis of the banking industry.



# CORPORATE FINANCE AND BANKING STRUCTURE

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## Research:

- Bank mergers: Focarelli-Panetta-Salleo JMCB 2002, Why Do Banks Merge?
- Barriers to entry: Bofondi-Gobbi RF 2006, Informational Barriers to Entry in Credit Markets.
- Capital adequacy: Gambacorta-Mistrulli JFI 2004, Does Bank Capital Affect Lending Behavior?
- SME lending: Bonaccorsi di Patti-Gobbi JBF 2001, The Changing Structure of Local Credit Markets: Are Small Business Special?



# CORPORATE FINANCE AND GROWTH

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## Research:

- Financial constraints: Angelini-Generale AER 2006, Firm Size Distribution: Do Financial Constraints Explain It All? Evidence From Survey data.
- Venture capital: Del Colle-Finaldi Russo-Generale Bank of Italy WP 2006, The Causes and Consequences of Venture Capital Financing.

