Research Article

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Alternative Banking and Theory

Abstract: Unlike business models of private banks based on profit maximization and shareholder-oriented governance, alternative banks (such as cooperative banks, government savings banks, and special purpose banks) share business models based on sustainable returns with longer time horizons, corporate missions that include social and public policy goals, and stakeholder-oriented governance. Strong evidence from recent research suggests that alternative banks often equal or outperform joint-stock banks in terms of efficiency, profitability, and risk management. This counters core ideas in contemporary banking theory and expectations of regulators about the superiority of private ownership and market-based banking. Concepts and theories from banking studies help explain how alternative banks outperform private banks in core functions such as creating and managing liquidity, pooling deposits, and reducing information asymmetries and agency costs. However, heterodox theories of the firm and institutional approaches to competitive advantage broaden the scope of analysis to explain further historical, social, and organizational advantages (and risks) in alternative banking. Alternative banks therefore require, and may inspire, alternative theories of banking and new approaches to bank regulation.

Keywords: banking, non-profit banks, agency theory, theory of the firm, banking theory

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1 Introduction

Explanations of the 2007–2008 global financial crisis (Lo., 2012; and the special issue in this journal: various authors, 2013) and debates about regulation in its wake rely on implicit or explicit normative assumptions about the business models of banks. Banks use to be seen as deposit-taking and loan-making institutions (Allen & Santomero, 2001). However, since Battacharya and Thakor (1993), contemporary banking theory favors market-based banking in the sense of banks offering products and services that can be traded on financial markets to manage risk, price assets and liabilities, allocate credit, and manufacture assets (Berger, Molyneux, & Wilson, 2010). Critics of contemporary banking theory such as Hardie and Howarth (2013a) suggest that market-based banking caused the recent financial crisis and has slowed recovery since. De Jonghe (2010) and Gorton (2010) call for a return to narrow banking (traditional deposit-taking and loan-making). Proposals to separate investment banking from commercial and retail banking such as the Volcker rule in the US, or ring-fencing in the UK (UK Independent Commission on Banking, 2011) also imply a return to traditional banking. However, to date, reforms have been watered down through compromises with market-based views of banking (Lall, 2012) and appear unable to reverse the trend toward market-based banking in large private banks.

Remarkably, contemporary academic research on banks and policy debates both have largely ignored alternative bank groups, large and small, that avoided the excessive risk-taking and market-based, profit-maximizing business models so widely blamed for crisis in 2007–2008. New associations such as the Global Alliance for Banking on Values¹ suggest the importance of initiatives in social and ethical banking, whatever the form of ownership and governance; and member institutions have also reported positive performance (Weber, 2013; Cornée & Szafarz, 2013; Cornée, Masclet, & Thenet, 2012; Weber & Remer, 2011). However, our category of alternative banks (Butzbach & Mettenheim, 2014) covers a much broader population of often very longstanding institutions such as cooperative banks, credit unions, government savings banks, special purpose (development) banks, building societies, thrifts, and mutual savings banks. Although broad, the concept of alternative banking is justified because these institutions differ from private banks and share business models based on: (1) disavowal of profit maximization and shareholder-oriented governance; (2) longer term business horizons involving sustainable returns; (3) business missions that include social and public goods; and (4) stakeholder-oriented, board-centered governance.

Several European alternative bank groups strayed from these principles. By mimicking private bank management strategies, Spanish Cajas de Ahorro (savings banks) helped drive the real estate boom and bust cycle that has devastated the country. In Germany, several *Landesbanken* (provincial government banks) sought to become global investment banks during the 2000s, only to be caught in the 2007–2008 crisis. The Austrian Raiffeisen cooperative bank group also strayed from core principles while expanding commercial operations across Eastern and Central Europe after the collapse of the Soviet Union, only to retreat after crisis hit the region in 2008. Likewise, in the UK, aggressive business strategies at odds with traditional alternative banking models also led to reversals at the Coop Bank in 2012-2013. Government banks in developing and emerging countries have long drawn criticism for crony credit, poor management, and environmental damage. However, many government-owned savings banks and development banks in these countries have recovered from capture and mismanagement under military rule and dictatorships to shape growth amidst democratization and reforms (Mettenheim, 2006); to provide countercyclical credit and adjust (unexpectedly well) to crisis after 2008; and, perhaps most importantly, to help reach vast numbers of bankless citizens through new social policies such as basic income (Mettenheim, Diniz, & Gonzalez, 2013).

This article builds on recent empirical research that finds alternative banks equal to or superior to private banks in terms of efficiency, profitability, risk management, and other standard criteria used in banking studies. These findings have been reported in many settings, most ironically many years *after*

¹ See references below.

liberalization, deregulation, privatizations, and foreign bank entry. Instead of converging toward private, market-based banking, alternative banks have modernized in a variety of ways to maintain or expand market shares, while seeking to maintain their peculiar identity and remain faithful to their core missions (see also Mettenheim, 2013). We explain this anomaly for contemporary banking theory, neo-classical economic approaches, and neo-liberal policy designs by focusing on the main features of savings banks, cooperative banks, and government special purpose banks. Our explanations of alternative bank performance are drawn from contemporary banking theory but also from heterodox research on firms and the institutional foundations of competitive advantage. Concepts from banking theory reveal how alternative banks perform core functions of modern banking such as creating liquidity, pooling deposits, reducing information asymmetries, and managing agency conflicts. However, heterodox theories of the firm reveal further institutional foundations of competitive advantages in alternative banking.

Since the 2007–2008 crisis, scholars, the financial press, and policy-makers have criticized the risky business models of private commercial and investment banks (Admati & Hellwig, 2013; US Government Financial Crisis Inquiry Commission, 2011). Although still marginal to policy debates and research in accounting, political economy and law, the errors of private banks have nonetheless begun to produce reassessment of alternative banks (Butzbach & Mettenheim, 2014) and raise concern about the loss of organizational diversity in banking (Michie & Oughton, 2013; Liikanen, 2012; Goodhart & Wagner, 2012; Ayadi, Schmidt, Llewellyn, Arbak, & De Groen, 2010; Ayadi, Schmidt, & Carbò Verde, 2009). However, this belated reassessment pales in comparison to decades of research biased toward private banks and reforms that sought to reduce or eliminate government and non-profit banks and credit institutions through privatizations, demutualization, liberalization, foreign bank entry, and deregulation of credit markets that, together, have profoundly changed the competitive setting for banks and other financial institutions such as pension funds and investment funds.

The bulk of financial economists and personnel at international policy-making institutions expected alternative banks to disappear, either sooner through privatizations or later because of liberalization; as the latter was expected to reveal the greater efficiency of private and foreign banks. Alternative bank managers were expected to abandon outmoded traditions of social and state banking in favor of profit-maximizing, market-based business models taken from private commercial and investment banks. However, defying expectations, alternative banking groups have, through a variety of strategies, modernized to hold their ground - maintaining or gaining market shares in many advanced and developing countries, especially in retail banking (deposits, savings accounts, and

lending to small and medium enterprises and households). And empirical studies have gone beyond descriptive evidence on market shares to demonstrate that alternative banks have often equaled or exceeded the performance of private banks in terms of cost, operational efficiency, and profitability. This is a paradox. As Canning, Jefferson, and Spencer (2003, p. 244) put it, "a central issue is why not-for-profit banks arise and survive in a world dominated by investor-owned banks, run for profit".

This article explains the unexpected persistence of alternative banks as follows. Section 2 defines alternative banks and differentiates these institutions from private banks. Section 3 explores the history of alternative banks to introduce their institutional foundations of competitive advantage. Section 4 summarizes and discusses recent evidence on the (good overall) performance of alternative banks in the challenging context of a changing bank industry and regulatory environment over the past decades. Section 5 explores why these findings about alternative banks matter for socio-economic development and banking system stability. Section 6 discusses the ability (and limits) of contemporary banking theory to explain the competitive advantages of alternative banks. Section 7 turns to agency theory, the dominant approach in banking theory and the literature on comparative bank performance, to identify several important competitive advantages of alternative banks - against the very conclusions offered by mainstream banking studies on the basis of their use of agency theory. However, Section 8 goes beyond agency theory to show how stakeholder governance embedded in social and political institutions helps alternative banks better mitigate information asymmetries through relationship banking. Section 9 further explores how alternative banks obtain funding and hold equity, reserves, and patrimony differently, and often better, than private banks. Section 10 summarizes the sustainable business models of alternative banks. Section 11 reviews evidence that alternative banks help smooth intertemporal risk, a critical function of banking systems. The conclusion synthesizes recent findings to suggest that banking studies may benefit both from analysis of alternative banks and the institutional foundations of competitive advantage in banking.

2 Defining and differentiating alternative banks

Our concept of alternative banks encompasses a broad, heterogeneous set of financial institutions including cooperative banks and savings banks, credit unions, mutual savings associations, government development banks, and

special purpose banks. These institutions may appear to have little in common. How can we compare small British building societies or local (sometimes "single window") Italian cooperative banks with financial behemoths such as the Rabobank or Crédit Agricole? Notwithstanding their differences, alternative banks share three core characteristics that differ fundamentally from private banks:

Organizational goals: Alternative banks reject profit maximization for the benefit of shareholders. This does not mean that alternative banks produce losses. As discussed below, they have been found by many empirical studies to be *more profitable* than for-profit banks. However, the corporate missions of alternative banks span a broad range of explicitly stated objectives to which sustainable profits are allocated, such as economic and social development, local public project finance, savings and credit for poorer households and small businesses, and long-term investments in public goods, social capital, and public policies.

Governance structure: The governance of alternative banks is stakeholderoriented and board-centered in the sense that they (a) are not run for the exclusive benefit of shareholders (when they have them); (b) are controlled and governed by a broader range of stakeholders: members in the case of mutuals, credit unions, and cooperatives; local and regional governments (and often clients/citizens) in the case of savings banks; and regional or national governments in the case of special purpose or development banks; and (c) are governed by corporate boards that tend to keep executives and staff under closer supervision and control than private banks.²

Business models: The business models of alternative banks differ from private banks along two crucial dimensions: (a) more cautious, longer term strategies to complete social and public policy missions through prudent banking and sustainable returns, and (b) corporate cultures and missions that value the social, cultural, and economic needs of their geographic areas or functionally defined members and clients.3

Table 1 compares the stakeholders, corporate missions and local rooting of private banks with the three major types of alternative banks: government savings banks, cooperative banks, and special purpose banks.

² See Section 7 for a discussion of this point.

³ Often, but not always, required in statutes and regulations.

	Private banks ⁴	Savings banks	Cooperative banks	Special purpose banks
Key stakeholder	Shareholders	Local, regional or national governments	Members	State agencies
Mission	Profit	Provision of savings and banking services to citizens; financial education; local public finance; small and medium enterprises finance; social and cultural project funding (public housing; local and regional development; public service provision)	Pool member resources to secure and improve access to credit and sustain local community development	National or regional development; mobilize private capital for public finance; secure credit for small and medium enterprises; public policy implementation (such as greening of industry and energy, human capital)
Local rooting ⁵	Weak	Strong	Strong	Medium

Table 1: Comparing private banks and alternative banks

These characteristics of alternative banks are mutually reinforcing. The absence of profit maximization weakens potential residual claims by shareholders; stakeholder-oriented governance helps maintain a broad range of corporate goals, often written in bank statutes and mission statements: stakeholder-oriented governance and a focus on sustainable returns instead of profit maximization through risky operations help lengthen the business horizons of alternative banks; the links of alternative banks to social organizations and government entities empower social forces and political representatives as stakeholders in corporate governance. To explain how these characteristics of alternative banks provide competitive advantages over private banks, we first turn to illustrations from the long history of alternative banking, then to banking theory and, finally, to heterodox theories of the firm and institutional foundations of competitive advantage.

⁴ The key features of private banks summarized here are taken from banking theory and theories of the firm discussed below. Private banks may also have social missions that temper profit maximization for shareholders. However, most large, commercial banks have gradually shifted toward profit maximization in the past 30 years, as a result of financialization (see Berger et al., 2010).

⁵ Understood here as a combination of (i) the importance of local stakeholders in the governance of the bank and (ii) the local focus of bank activities.

3 Alternative banking history

Alternative banks emerged alongside private commercial and merchant banking very early in European history (Mettenheim & Butzbach, 2014). Savings banks were founded by local governments and entities throughout Europe in the late eighteenth and early nineteenth century (Mura, 1996). But savings banks remit further back in history: to early Christian fund management; to the pawn-credit foundations of religious orders in medieval Italy; and to the Monti di pietà savings and pawn banks founded throughout Italy in the fifteenth century (Menhegin, 1986). Raiffeisen and Schultz-Delitz credit cooperatives were founded across German speaking areas after crop failures and economic crisis ravaged small farmers and communities in the late 1840s, while Louis Blanc and Pierre Joseph Proudhon also inspired public and cooperative credit movements across francophone countries. Development banks were created to finance infrastructure and accelerate industrialization across Continental Europe in the nineteenth century and in many developing countries during the twentieth century (Aghion, 1999; Zysman, 1983; Diamond, 1957). In Europe (and its colonies), government postal savings banks rapidly improved access to payment services and savings accounts after the 1860s.

Some alternative banks were indeed captured in the early twentieth century by governments that bypassed parliaments to use saving deposits for public finance and war (Marks, 1905). Fascist and communist governments nationalized, often by force, the vast branch office networks, and assets and liabilities, of cooperative banks and savings banks (Castronovo, 2003; Kooper, 1995; Born, 1967). However, after 1945, alternative banks once again proved more positive, becoming instrumental for recovery from war and sustained growth across Europe (Shonfield, 1965) to remain critical institutions in complementary relations (Schmidt & Tyrell, 2001) with public savings and pension programs and other core features of Welfare States. The following sub-sections draw from the history of alternative banking groups (especially in Italy and Germany) to illustrate better their differences from private banks - especially during critical junctures of national economic development (i.e. before World War I and after World War II).

3.1 Italy

In Italy, alternative banks grew during the nineteenth and twentieth centuries to retain substantial market shares until market-based reforms in the 1990s transformed most savings banks into joint-stock firms through privatizations. Table 2 reports the credit provided by different types of banks in Italy from 1861 to 1910.

During this critical period of rapid development and modernization before World War I, the market share of private banks declines from over half to one third of total loans provided by credit institutions in Italy. In comparison, savings banks and Monti di pietà, popular banks and credit cooperatives, and government special credit institutions all grew to hold substantial lending market shares during the period of rapid modernization and industrialization in Italy.

Table 2: Italian credit institution loans, 1861-1910 (billion euros)

Year	Private, for- profit banks	Savings banks and <i>Monti di pietà</i>	Popular banks and credit coops	Govt. special credit institutes	Total
1861	38.7	38.7		1.5	79.0
1870	47.1	137.4	20.4	23.3	228.3
1880	213.0	234.0	92.7	144.6	684.2
1890	362.3	391.9	209.1	427.0	1,390.3
1900	331.9	367.4	234.4	349.1	1,282.8
1910	1,029.7	857.7	652.1	379.2	2,918.7

Source: De Bonis, Farabullini, Rocchelli, and Alessandra (2012).

Further data are available for later periods that suggest the importance of branch office networks for alternative banks and relational banking. Table 3 reports the number of branch offices held by different types of banks in Italy from 1936 to 1966. The private bank share of branch office networks declines during this period from 81.8 to 47.9%. In comparison, savings banks and *Monti* di pietà increased share of branch offices 20.0-28.8%, credit institutes 12.2-14.7%, popular coops 15.1–16.6%, while rural savings banks lost shares (15.7– 7.9%) and national-interest banks declined slightly (7.9–7.7%). Alternative banks thereby retained competitive advantage over private banks during the post-war period of sustained growth and social economy in Italy.

Table 3: Branch offices of types of banks, Italy 1936-1966

Year	J-Stock*	Credit cooperatives	Other*	Credit institutes	National banks	Popular coops	Savings and <i>Monti</i> <i>di pietà</i>	Rural savings	Total
1936	1,929	2,215	192	935	607	1,161	1,536	1,202	7,656
1940	1,502	1,696	136	996	577	946	1,664	987	6,866
1950	1,778	1,943	109	1,183	661	1,142	2,131	691	7,751
1960	2,087	2,229	114	1,371	737	1,476	2,632	758	9,203
1966	2,334	2,459	96	1,501	791	1,695	2,940	813	10,199

Notes: *= privately owned banks. Fonte: Banca d'Italia (1977).

Reforms during the 1990s and 2000s privatized Italian savings banks and reduced direct government credit channels in favor of private banking. However, contrary to expectations about private bank efficiency, popular cooperative banks have kept strong market shares. And, instead of wholesale privatization, savings bank shares were allocated to new foundations designed to continue the social and cultural missions of savings banks. This is just one permutation of bank change across Europe since the 1990s.

3.2 Germany

Since the nineteenth century, studies of banking in Germany use the term "three pillars" to describe the largely equal market shares held by private banks (pillar one), cooperative banks (pillar two), and Sparkasse local and regional government savings banks (pillar three) (Schmidt, Bülbül, & Schüwer, 2014). The number of Sparkasse savings banks grew from 85 to 1,765 (mostly local government banks) between 1839 and the onset of World War I. Table 4 reports data from this critical period of rapid development and industrialization in Germany (1839–1913) before world wars, hyperinflation and depression changed the context of banking. The average balance of savings accounts, number of accounts per 100 residents, and balances held per capita population suggest that past debates about savings banks in Germany remain relevant for research on financial inclusion and social banking today (Schmidt, 2009). Indeed, in the first

Table 4: German Sparkasse savings banks, 1839-1913

Year	Banks (n)	Branch Offices (n)	Accounts (n)	Accounts per 100 residents (marks)	Balance (million marks)	Average balance (million marks)	Balance per million pop./marks
1839	85				18		1.24
1845	157				38		2.37
1850	234		278,147		54	195.4	3.29
1855	323		423,542		97	228.7	5.6
1865	517		919,513		268	291.3	13.8
1875	1,005		2,209,101	8.6	1,112	503.4	43.2
1885	1,318	1,485	4,209,453	14.8	2,261	537.1	79.5
1895	1,493	2,448	6,876,664	21.5	4,345	631.9	136.3
1900	1,490	2,828	8,670,709	25.1	5,746	662.6	166.4
1910	1,711	4,619	12,900,304	32.1	11,107	860.1	276.2
1913	1,765	5,268	14,417,642	34.2	13,111	909.4	311.4

Source: Büschegen (1983, p. 399).

decade of the twentieth century, the "Sparkasse question" turned on whether the growth of savings deposits at these institutions indicated drift from social missions that increased risk (because of more volatile middle class and business deposits), or whether traditional (poorer) clients had instead simply accumulated savings over time. The latter position prevailed, while further debate ensued about whether the small savings of the poor in savings banks helped ameliorate, or exacerbate, business cycles (Seidel, 1909).

Until today, German savings banks retain very large market shares in many markets for banking, insurance, finance, and related services. A core competitive advantage of savings banks is their "two-tier" structure composed of independently owned and operated local banks and a *shared* wholesale finance group (the Finanzgruppe Deutscher Sparkassen- und Giroverband, FDSG) that offers investment banking, finance, and insurance through 631 independent local and regional savings banks. Wholesale operations of German savings banks emerged in the late nineteenth century to launch many innovations in capital markets and finance throughout the twentieth and into the twenty-first century. In 2010, the balance sheets of German savings banks (reported together as the Sparkasse Finance Group) summed over *3.4 trillion euros* (far more than the largest private banks in the world), uniting 6,201 firms with 21,700 branch offices and 366,500 employees (See Table 5). Through their multi-level giro organization, German savings banks cooperate to reduce costs and coordinate to improve monitoring and control over member banks – mechanisms not available to private banks

Table 5: The German Sparkasse Finance Group, 2009

	Firms	Branch Offices	Staff	Total assets (in bn euro)
Sparkasse Finance Group	6,201	21,700	366,500	3,410
Sparkasse savings banks	631	15,685	258,737	1,073
Landesbank groups	7		50,476	1,689
DekaBank giro center bank	1		3,667	133
Sparkasse insurance group	1		30,000	17
Regional mortgage savings banks	10		8,896	52
Leasing groups	5		10,595	73
Capital market groups	85	1,447	506	2
Factoring groups	3		213	12
Finance IT division			5,375	
LBS real estate	10		455	4
Commune management firms	8			

Source: Finanzgruppe Deutscher Sparkassen- und Giroverband (2010, p. 2).

forced to compete by maintaining their own retail networks and wholesale banking and finance operations individually.

The second pillar of alternative banking in Germany is composed of cooperative banking groups that remit to Raiffeissen and Schultz-Delitz credit cooperatives founded in the 1840s. Credit cooperatives also grew rapidly during the nineteenth century; from 133 to 1,245 banks and from 31,603 to 748,058 members 1860–1920. And like savings banks, the trajectory of German cooperative banks reflects traditional business models of deposit-taking and loan-making, with conservative levels of capital reserves and members balances. Table 6 shows this gradual accumulation of savings, assets, (equity) balances for members, and reserves by commercial credit cooperatives in Germany during the critical period of rapid development and industrialization from 1860 to 1920 before hyperinflation and fascism changed banking.

Table 6: German commercial credit cooperatives, 1860-1920

Year	Coops	Members	А	Asset side Liability side		Asset side Liability side		Reserves*
			Assets*	Loans*	Savings Deposits*	Member Balances*		
1860	133	31,603			7	1	0	
1870	740	314,656	187	166	131	40	4	
1880	905	460,656	493	438	353	102	16	
1890	1,072	518,003	620	538	438	117	28	
1900	870	511,061	806	672	586	133	45	
1910	939	600,387	1,477	1,202	1,084	216	94	
1920	1,245	746,058	7,158	4,026	6,480	391	164	

Note: *Million marks.

Source: Deutsche Bundesbank (1976, p. 66).

The "three pillars" expression actually underestimates the importance of alternative banking in Germany because it omits federal and provincial government special purpose banks that hold an additional 10% market share, depending on the sector, product, and service (Schmidt et al., 2014; Krahnen and Schmidt, 2004; Deeg, 1999). Table 7 reports the balance sheet, number of staff and government shareholding structure of the 20 special purpose banks in Germany in 2010. Together, these institutions held 834.4 billion euros in assets with 12,730 employees, serving provincial and federal governments by leading bank consortia and tapping capital markets. German special purpose banks remain especially important in public and home finance, public building construction, infrastructure modernization, environmental innovation, the greening of industry, and provision of health and other public services.

Table 7: German special purpose banks, 2010

	Staff	Balance sheet*	Majority shareholding**
Federal government special purpose banks KfW Bank Group	4,600	400.1	80% Fed. 20% State Govts.
Landwirtschaftliche Rentenbank	218	75.8	Fed. Govt.
State government special purpose banks			
Investitionsbank Schleswig-Holstein	799	16.7	Schleswig-Holstein
Bremer Aufbau-Bank	55	1.3	Bremen Holding
Hamburgische Wohnungsbaukreditanstalt	185	5.1	Hamburg
NBank Invest. und Förderbank Niedersachsen	426	5.7	Niedersachsen
NRW Bank (Nordrhein-Westfalen Bank)	1,224	161	98.6% Nordrhein-Westfalen
Investitions- und Strukturbank Rheinland-Pfalz	186	8.5	Rhein-Pfalz
LTH, Landestreuhandbank Rheinland-Pfalz	86	1.9	Rhein-Pfalz
SIKB Saarländische Investitionskreditbank	99	1.2	51% Saar
L-Bank, Landeskreditbank Baden-Württemberg	1,230	59.7	Baden-Württemberg
LfA Förderbank Bayern	344	19.4	Freistaat Bayern
Bayerische Landesbodenkreditanstalt	227	21.2	Bayrischen esbank
Landesförderinstitut Mecklenburg-Vorpommern	246	2.5	NORD LB
Investitionsbank Berlin	673	20.4	Berlin
Investitions Bank des Landes Brandenburg	505	11.8	50% Brandenburg, 50% NRW Bank
Investionsbank Sachsen-Anhalt	349	1.3	NORD/LB
Thüringer Aufbaubank	336	2.5	Freistaat Thüringen
Sächsische Aufbaubank Förderbank	905	8.7	Freistaat Sachsen
Wirtschafts- und Infrastrukturbank	397	9.6	Landesbank Hessen-Thüringen
Total		12,730	834.4

Source: Association of German Public Sector Banks (Bundesverband Öffentlicher Banken Deutschlands, VÖB). Note: *billion euros **100% where percentage not reported.

Some regional Landesbanks were caught in the crisis or succumbed to corruption, leading observers of German finance to call for ending links between savings banks and special purpose banks (Hilgert et al., 2011). However, not all German special purpose banks incurred losses and, as a whole, appear to have been important sources of counter-cyclical finance and credit since the 2007-2008 global financial crisis. Table 8 reports the lending of German special purpose banks from 2008 to 2012; total investments increased from 6.7 to 9.0 billion in 2008–9, just as private banks incurred major losses from exposures in capital markets (Hardie & Howarth, 2013b).

Table 8: German special purpose bank finance and credit, 2008-2012, million euros

Sector	2008	2009	2010	2011	2012
Commercial	3,851.2	4,611.4	3,913.6	3,581.0	3,430.4
Local government	1,030.2	1,826.5	1,249.8	1,247.4	823.7
Home and public construction	835.3	1,173.8	983.9	1,020.9	785.7
Agriculture and agroindustry	91.3	386.7	386.2	379.4	387.1
Other	976.8	109.4	1,141.9	1,003.5	944.1
Total	6,784.7	9,092.9	7,675.4	7,232.2	6,371.0

Source: Bundesverband Öffentlicher Banken Deutschlands (2013, p. 2).

Data on bank performance reported by the German central bank also suggest the competitive advantages of alternative banks (see Table 9 and appendices). One clear advantage of alternative banks is cheaper administrative costs than private banks. Given the lean central offices of special purpose banks, the cost-income ratios⁶ of these institutions declined from 47.9 in 1970 (vs 84.5 at big private banks and 70.0 at Landesbanks) to 32.2 in 2010 (vs 83.1 at big private banks and 57.9 at Landesbanks). And because savings banks and cooperative banks reduce costs by sharing wholesale operations, the latter also report cost-income ratios below large private banks and reduced this crucial indicator of bank performance from 1970 to 2010 (from 74.3 to 63.0 and 70.4 to 64.5, respectively) (see Table 9).

However, before turning to further evidence of recent performance, a historical introduction to alternative banking would be incomplete without mention of government postal savings banks.

⁶ The cost-income ratio is calculated as total administrative spending divided by gross earnings (aggregate net interest and net commissions received).

Year	Private Big	Regional	Savings	Coops	Government Sp. Purpose	Landes
1970	84.5	76.8	74.3	70.4	47.9	70.0
1980	85.9	80.3	68.7	72.7	50.5	72.5
1990	69.7	77.4	67.9	76.5	71.0	66.0
2000	93.4	76.4	69.0	76.1	30.5	62.7
2010	83.1	69.2	63.0	64.5	32.2	57.9

Table 9: Cost-income ratios by type of German bank, 1970-2010

Note: Cost-income ratio = Total administrative spending/gross earnings (aggregate net interest and net commissions received).

Source: Deutsche Bundesbank (2013). Available on www.bundesbank.de.

3.3 Postal Savings Banks

After the UK Postal Savings Bank was founded in 1862, governments throughout Europe began to offer savings accounts and other banking services through the vast branch office networks of postal agencies. Postal savings banks rapidly acquired large numbers of depositors and mobilized large quantities of savings. From 1862 to 1908, the UK Postal Savings Bank increased branch offices from 2,535 to 15,239, depositors from 178,495 to over 11 million (over 25% of the population), and deposits from 8.2 to 781.8 billion US dollars⁷ (Table 10). Postal savings banks experienced similar rapid growth throughout Europe and European colonies before World War I (National Monetary Commission, 1909).

After independence from colonial rule, postal savings banks were often retained by governments in developing countries for their large branch office networks and high ability to mobilize savings and facilitate payments and service provision. Countries that closed postal banks have recently recreated them. The creation of the China Postal Savings Bank in 2007 (with over 40,000 branch offices) and resale of banking concessions inside the 6,000 Brazilian postal offices in 2011 suggest the continued importance of postal banks with profound opportunities (and risks), especially for financial inclusion. In Africa, post-independence governments used postal offices to promote access to payment and banking services toward poverty alleviation (Kamawe-Tsafack, 2002). Indeed, to counter the dramatic increase of financial exclusion in the US, the postal service has, once again, proposed expanding non-bank financial and

⁷ Data in dollars, facilitating comparison, were calculated according to foreign exchange rates by US consulate officials at that time for the US National Monetary Commission.

Table 10: Postal Savings Banks, UK, France, and Italy, 1862-1908

Year	Offices	Depositors	Deposits (US\$)
UK Postal Savii	ngs Banks, 1862–1908		
1862	2,535	178,495	8,264,392
1870	4,082	1,183,153	73,479,789
1880	6,233	2,184,972	164,218,275
1890	9,681	4,827,314	329,145,788
1900	13,341	8,439,983	659,652,347
1908	15,239	11,018,251	781,794,533
France Postal S	avings Bank 1882–1908		
1882	6,024	211,580	9,187,116
1890	6,817	1,475,820	79,793,736
1900	7,697	3,565,941	194,980,796
1908		5,291,673	296,964,867
Italy Postal Sav	ings Bank, 1876–1908		
1876	1,989	57,354	471,577
1880	3,313	339,845	8,926,802
1890	4,479	2,126,289	59,923,342
1900	5,143	3,990,983	131,652,255
1908	8,735	4,981,920	290,808,886

Note: Dollar values calculated by US consular staff reporting to the National Monetary Commission. Time series ends the year before the Commission report.

Source: National Monetary Commission (1909, pp. 34-44).

payment services at branch offices.⁸ Although closed because of opposition by private banks in 1967, the US Postal Service Savings System had provided widespread access to basic savings since its creation in 1911 (Kemmerer, 1917). Postal savings banks remain critical institutions for promoting savings and averting financial exclusion.

In sum, alternative banks have played important roles in a variety of banking and financial systems since the nineteenth century, especially in terms of promoting financial inclusion, mobilizing savings and public finance. Given the long history and wide variety of alternative banks, it is difficult to measure the overall importance of these institutions. Industry associations such as the World Savings Banks Institute and the International Co-operative Banking Association provide information about member banks, but no aggregate data exist for public development banks, despite their size and importance in many advanced and

⁸ On proposals by the USPS, see: Office of the Inspector General, USPS (2014). On financial exclusion in the US, see FDIC (2012).

developing countries. Moreover, because alternative banks vary widely across sectors, countries, and regions, these institutions may not appear in standard aggregate measures of banking activity. For example, according to the overall market shares of UK bank deposits in the 1990s, mutual building societies appear marginal while, in fact, they remained dominant players on the mortgage lending market.

Differences across world regions also are marked. While local and regional savings banks and cooperative banks predominate across Continental Europe (Groeneveld, 2014; Schmidt et al., 2014); development banks and savings banks or institutes were centralized in developing and emerging countries, often by military or authoritarian governments (Mettenheim, 2014).

It is thus fair to say that given the importance of alternative banks in some segments of banking and many financial systems, these institutions have indeed been historically significant and deserve more attention in research on banks and banking.

4 Alternative banks after liberalization. deregulation, privatizations, and IT revolution: a discussion of empirical evidence

Even where alternative banks retained large market shares and critical roles in banking and finance, fundamental changes in the legal, regulatory and competitive environment of banking appeared to threaten their survival after 1980. Reforms in many countries radically altered banking through: (a) de-segmentation, in the sense of ending strict separation between segments of banking markets such as short-term money markets and long-term lending; household and corporate lending; and retail and wholesale banking (for example, the 1999 Gramm-Leach-Bliley Act in the US, which repealed core provisions of the Glass-Steagall Act restricting affiliations between deposit banks and trading firms); (b) financial market liberalization that reduced legal and regulatory barriers to entry; (c) liberalization of credit markets and prices that sought to reduce or end administered credit in state-centered financial systems such as France or Italy (or abandon informal interest rate controls in countries such as the UK); (d) statutory normalization designed to end protection of alternative banks (usually leading to their transformation into or merge with joint-stock banks; for example, the Building Societies Act of 1986 allowed British building societies to demutualize; or the 1990 Amato-Carli law in Italy that transformed savings banks and other public banks into joint-stock companies); and finally (e) large-scale privatizations of state-owned banks in countries with traditions of state-owned enterprises such as France and Italy in Europe, as well as many developing, emerging, and transition countries.

Liberalization, deregulation, privatizations, and mergers and acquisitions have radically changed banking and finance. Banks and other financial intermediaries such as insurance companies and investment funds shifted business away from traditional deposit-taking and loan-making toward a wide variety of products and services traded directly on capital markets. New technologies of information and communication also revolutionized banking with new electronic channels such as ATMs, online banking and mobile banking via cellular phones – technologies that bypass traditional branch offices and personal, faceto-face provision of services traditionally associated with relational banking (see below).

These fundamental changes have challenged all banks, but alternative banks most dramatically. Privatizations transformed many alternative banks into joint-stock corporations, often abruptly ending traditional governance structures and practices. For example, building societies, a non-profit pillar of the UK financial system, were largely dismantled after reforms in 1986 allowed the most powerful societies to demutualize. These demutualized building societies formed the backbone of for-profit banking groups that played central roles in exacerbating the 2007-2008 banking crisis (Northern Rock, Halifax, Bradford, and Bingley). Liberalization of banking and credit markets and waves of consolidation through mergers and acquisitions forced many local cooperative banks and savings banks to merge with or be acquired by larger for-profit banks. This process was most marked in the UK and Italy, Finally, foreign bank entry and financial market liberalization encouraged all banks to diversify away from traditional business lines and pay more attention to short-term profit margins. Although widely expected to reveal the greater efficiency of private banks, alternative banks appear to have adopted new technologies through modernization strategies capable of tapping their traditional competitive advantages.

As a result of these far-reaching changes in their competitive, technological, and regulatory environment, the fate of alternative banks has differed. In the US and UK, traditional savings and cooperative banks have been marginalized, either through collapse of the sector during transition to market-based banking (the US Savings and Loan crisis in the late 1980s) or demutualization (the 1986

⁹ In the UK, most large building societies choose to demutualize and then merge with large joint-stock commercial banks in the 1990s; in Italy, most large savings banks, once granted a joint-stock status, merged with former public banks to form the backbone of the country's largest joint-stock banking groups, Intesa SanPaolo and Unicredit.

Building Society Act led large UK building societies to demutualize, thus causing the cooperative movement in UK banking to shrink four fifths of its total assets during the 1990s). However, alternative banks kept large market shares in many other countries, both in lending and in retail funding markets, especially in Continental Europe. In France and Germany, cooperative banks and savings banks retain dominant positions. As mentioned above, alternative banks constitute two of three pillars in German banking. In Italy, 5 of the largest 10 banking groups (in assets) are cooperative banks (Banche Popolari). In the Netherlands, after declining during the 1990s, the cooperative group Rabobank recovered over the next decade to remain the second largest bank in the country. Alternative banks also retain powerful market positions in many developing countries. In large emerging countries such as Brazil and India, state-owned banks remain the largest and fastest growing banks long after liberalization and privatizations (Mettenheim, 2014).

However, the evidence goes beyond market shares. In the appendix, Table 16 summarizes the findings, research methods and data of 21 empirical studies that compare the performance of alternative banks, mostly in terms of costefficiency, profitability, and riskiness. Overall, these studies provide strong evidence from diverse settings that alternative banks can compete with and also outperform private banks, even after liberalization, deregulation, and adoption of new technologies. In particular, these studies find cooperative banks and savings banks to be at least as cost-efficient 10 as their commercial competitors. Ayadi et al. find European savings banks as much cost-efficient as commercial banks (2009). Although German cooperative banks appear slightly less costefficient, cooperative banks in France, Italy, and Spain are largely more costefficient than their commercial peers (Ayadi et al., 2010). This confirms findings from Iannotta, Nocera, and Sironi (2007) showing that government-owned and cooperative banks are more cost-efficient in 15 European countries (in a sample of 181 large banks). Altunbaş, Carbó Valverde, and Molyneux (2003) also find slightly higher cost-efficiencies with savings and cooperative banks in a sample study of banks in 15 European countries and the US 1990-2000. Savings and cooperative banks were found to be more cost-efficient than private banks in all but three countries. Country studies such as Altunbas, Evans, and Molyneux (2001) on Germany, Giordano and Lopes (2009) on the Italian cooperative sector,

¹⁰ Cost-efficiency is defined here as the ability of banks to minimize the cost of inputs for a given output. Of course, this rather narrow view raises a number of questions as to what is the implicit business model underlying these efficiency measures. The theoretical and methodological biases of bank performance studies are addressed in other sections below.

and Cebenoyan et al. (1993) on the US savings and loans sector obtained similar results.11

Alternative banks also perform well in terms of profitability. Again, this is surprising because they do not focus on profit maximization. Indeed, Berger et al. warn *against* using measures of profitability to compare government banks with private banks because "the measures of performance and economic consequences employed in these studies do not always correspond to the objectives of the state-owned banks" (Berger, Clarke, Cull, Klapper, & Udell, 2005). This caveat applies to studies of savings banks and cooperative banks that emphasize profitability and casts doubt on comparisons between alternative banks and private banks based on measures drawn from joint-stock firms (such as stock returns used by Cole and Mehran (1998) on a sample of US thrift institutions). More appropriate measures for analysis of alternative banks may be found in studies of cooperative institutions or non-profit organizations; while other explanations of performance (such as alternative bank specialization in more traditional, safer, and profitable lines of business such as retail and mortgage lending) need to be explored.

Notwithstanding these problems of inappropriate measurement and comparison, alternative banks still fare well in recent studies of profitability. Dietrich and Wanzenried (2011) find that Swiss government-owned banks performed better than privately owned commercial banks during the crisis years (2007-2010), while pre-crisis performance was at par. 12 Millon Cornett, Guo, Khaksari, and Tehranian (2010) present mixed evidence on the comparative performance of government banks. Studying a sample of East Asian banks from 1989 to 2004, the authors find that state-owned banks were less profitable, held less core capital, and had greater credit risk than privately owned banks prior to the 1997 crisis.¹³ However, East Asian government banks have approached private bank levels of performance since the 1997 financial crisis in Asia. Micco, Panizza, and Yañez (2007) find that state-owned banks in developing countries are less profitable than private-owned banks. However, Bonin, Hasan, and

¹¹ An exception is Mester (1993) who finds, on the contrary, in a sample of more than a 1,000 US savings and loans surveyed in 1988, that joint-stock savings and loans outperform their mutual peers in terms of cost-efficiency.

¹² An anonymous referee suggests that this is because state banks were prohibited from international banking.

¹³ However, it should be said that lower or higher credit risk are affected by risk measurement methods, themselves associated with bank regulations such as core capital requirements under Basle agreements. We thank an anonymous reviewer for raising this point.

Wachtel (2005) find significant differences between state banks and private banks in Eastern Europe in terms of profit efficiency. An earlier comparison of European banks found, on average, that state banks posted higher returns on assets than private banks (Molyneux & Thornton, 1992). Aggregate comparisons of public and private banks after the 2007 crisis also become difficult because nationalizations or public rescue of banks undercut this dichotomy.

Ayadi et al. (2010) find German and Spanish cooperative banks more profitable than commercial banks in terms of returns on assets and equity. However, this does not hold for cooperative banks in other European countries. After excluding small cooperative banks and savings banks, Iannotta et al. (2007) find that government-owned banks and cooperative banks perform worse than private, commercial banks in terms of profitability and riskiness. Altunbas et al. (2003) also find that European commercial banks are slightly more profitable than their non-profit peers. However, these findings from comparative studies are reversed in several analyses of specific countries: Chakravarty and Williams (2006) on Germany, Crespi, Garcia-Cestona, and Salas (2004) on Spain, Altunbas et al. (2001) on Germany, Valneck (1999) on British building societies, and Cebenoyan, Cooperman, Register, and Hudgins (1993) on the US all find non-profit banks to be *more profitable* than for-profit banks.

Results from comparison of risk management in alternative banks and private banks are also mixed. Standard measures of bank risk such as *z*-scores, which measure default probabilities, or earnings volatility produce mixed results. Studies by La Porta, Lopez-de-Silanes, and Schleifer (2002), Millon Cornett et al. (2010), and Iannotta et al. (2007) find government-owned banks (but not cooperatives in the latter case) to be less stable; while Ayadi et al. (2009, 2010), Beck, De Jonghe, and Schepens (2012), Bongini and Ferri (2008), Garcia-Marco and Robles-Fernandez (2008), Cihak and Hesse (2007), Iannotta et al. (2007), Salas and Saurinas (2002), and Esty (1997) all report higher earnings stability for cooperative banks and savings banks than in private banks. Ayadi et al. (2009), Beck et al. (2012), and Garcia-Marco and Robles-Fernandez (2008) find lower probabilities of default in cooperative banks and savings banks compared to private banks.

Comparisons of credit risk also find cooperative banks and savings banks to have fewer non-performing loans than commercial banks (Beck et al., 2012; Salas & Saurina, 2002). Data from the Central Bank of Brazil suggest that levels of non-performing loans in Brazilian government banks fell from very high levels under military rule and transition governments to well below levels of private banks in the country after transition to democracy during the 2000s (Mettenheim, 2010). Although it is difficult to control for the practice of rolling over bad loans to reduce levels of non-performing loans, data from the Reserve

Bank of India also suggest that the level of non-performing loans at state banks has converged to private bank levels during the 2000s (Mettenheim, 2014).

In sum, comparative statistical analyses bolster the idea that alternative banks have realized competitive advantages over private banks. Despite the profound changes in banking produced by liberalization, deregulation, and new technologies since the 1980s, alternative banks in many countries have not only survived; they have fared well on the basis of standard indicators of performance in empirical comparisons with private banks. Using more adequate measures to assess alternative bank performance (such as counter-cyclical lending or credit rationing) also produce findings favoring these institutions over private banks (Schclarek-Curutchet, 2014). However, most studies still use standard measures of bank profitability, efficiency, and risk management taken directly from the literature on private banking. 14 This is a tough test suggesting that alternative banks do indeed compare well with private banks.

Before turning to theories of banking and the institutional foundations of competitive advantage to explain why alternative banks perform as well or better than private banks, a note on why alternative banks matter is in order.

5 Why alternative banks matter

Alternative banks matter because they counter the credit rationing of private banks (Bresler, Grossle, & Turner, 2007), help avert capital drain (Hakenes & Schnabel, 2006), and promote financial inclusion by serving poor and geographically isolated citizens that private banks increasingly refuse to retain as clients (Federal Deposit Insurance Corporation, 2012). Alternative banks also provide important institutional resources for social and political forces and policy options for governments. And given the hard realities of fiscal constraints in advanced and emerging economies, it is essential to recognize that government banks can dramatically increase funding for public policies (banks do create money, after all) and improve policy implementation by monitoring and control public projects (Biondi, 2013; Mettenheim, 2010).

¹⁴ Whether this provides tough tests that indicate competitive advantages in alternative banking or, instead, that alternative measures and alternative theories are needed is a question we return to below.

5.1 Alternative banks as institutions for social and economic development

Two functions of alternative banks stand out in social and economic development: enlarging access to banking services and funding economic activities. The core mission of credit cooperatives and savings banks (since their emergence in the nineteenth century) is to encourage savings among popular and working classes and meet the financial needs of low- and middle-income members and citizens. Cooperative banks and local and regional government savings banks still specialize in retail lending (to households and small firms) and holding deposits of low- and middle-income households. Despite increased competition for deposits (and low interest rates set by central banks since 2008), cooperative banks and savings banks nonetheless retain large shares of retail bank deposit markets.

Cooperative banks and savings banks have also played a key role in channeling savings to public finance through government securities and encouraging home ownership in many European countries since the nineteenth century. In advanced and emerging economies, public development banks retain explicit mandates to finance a broad array of public goods and projects, ranging from funding small and medium enterprises to financing social housing and local and regional economic development.

5.2 Alternative banks as buffer for systemic stability

Alternative banks also improve the overall functioning of financial systems, especially systemic stability. Recent research on diversity in banking develops three arguments relevant for understanding how alternative banks may improve the stability of banking and financial systems (Ayadi et al., 2010, 2009; Haldane and May, 2011). The first argument simply notes the importance of diverse business models within and across banking systems, especially in terms of organizational purpose and risk management. Such arguments can be found in recent studies of alternative banks cited above and official government reports, such as the UK Treasury report on financial regulation (HM Treasury, 2010); or the Liikanen Report for the European Commission that defines six dimensions of diversity in banking (size, ownership, capital and funding, activities revealed by balance sheets and income statements, corporate and legal structure, and geographical scope) (Liikanen, 2012). Michie and Oughton (2013) emphasize bank diversity in terms of ownership (shareholding structure), competition (market structure), balance sheet resilience, and geographical spread.

The second argument is that diversity is valuable in itself as a characteristic of the banking sector as a whole. In other words, banking systems composed of heterogeneous organizations do better at mitigating systemic risk than homogeneous banking systems, whatever the source of heterogeneity. This point is very similar to the view that homogeneous banking systems suffer from a toomany-to-fail problem, whereby an implicit guarantee by governments "induces banks to herd ex-ante in order to increase the likelihood of being bailed out ex-post" (Acharya & Yorulmazer, 2007).

More broadly, diversity helps reduce systemic risk by reducing the collinearity of bank portfolios. Indeed, one reason behind the global financial crisis of 2007-8 was that banks invested in the very same asset classes (such as mortgage assets) because of the high correlation of diversification strategies at banks. In other words, too many banks chose to diversify their revenue in similar ways. As Haldane (2009) famously pointed out, individual diversification by banks may decrease systemic diversity and increase systemic risk. This has been confirmed by Corsi, Marmi, and Lillo (2013) and explained further as phenomena driven by market-based banking in Minskyian cycles of financial instability by Solomon and Golo (2013). Wagner makes related argument that the homogenization of banking systems has reduced the ability of banks to share risk, such that the re-optimization of bank portfolios tends to disrupt liquidity creation in the banking system (Wagner, 2010, 2008; Goodhart & Wagner, 2012). Biondi and Fantacci (2012) further demonstrate how liquidity was designed as a market-based process driven by use of fair value accounting (instead of historical cost accounting) that has culminated in increased market distress and massive injections from monetary authorities to preserve liquidity. These studies go beyond typologies and differences in organizational forms of banks to identify the importance of diversity in the industry.

A third argument suggests that diversity is important for the evolution of banking systems. For Michie (2011, p. 309), "In a situation of uncertainty and unpredictability, we cannot know which model will prove to be superior in all possible future circumstances, so we ought to be rather cautious before destroying any successful model." Arguments about banking diversity do not imply support for alternative banks per se. However, they do suggest that alternative banks improve banking and financial systems - especially because their lower levels of exposure to markets and smaller size may allow them to better withstand adverse economic conditions (Vallascas & Keasey, 2012; De Jonghe, 2010).

In terms of the "three pillars" description of German banking, banking systems that rely exclusively on one pillar (private, market-based banking) may well be less stable than banking systems that retain two further pillars, i.e. large groups of independent local and regional cooperative banks and savings banks.

6 Explaining competitive advantages of alternative banks with banking theory¹⁵

To go beyond metaphors and explain why alternative banks have outperformed private banks so consistently, one naturally turns to theories of banking. However, contemporary banking theory, as presented, for instance, in the Oxford Handbook of Banking (Berger et al., 2010), or textbooks (Matthews & Thompson, 2008), provides very scant reference to savings banks, cooperative banks, or government banks. None of the 36 chapters of the 2010 Handbook deal with alternative banks or non-profit financial intermediaries. Savings banks and mutual banks are absent from the *Handbook* index; cooperative banks appear twice (in a chapter on Japan); development banks once (the Development Bank of Japan); thrift institutions twice in a chapter on the US alongside an entry on thrift failures; and state-owned commercial banks four times in a chapter on transition countries. Ignoring alternative banks in a handbook published three years after the 2007 global financial crisis indicates a glaring omission in mainstream banking studies. However, heterodox theories of banking seem to share the same apparent lack of interest in alternative banks (Nasica, 2010; Bertocco, 2006), even when the purpose of analysis is to reassess what banks should do (Wray, 2013; Dymski, 1988). And while economists did pay more attention to non-profit financial intermediaries in the past, research focused almost exclusively on governance and ownership issues.¹⁶

A closer look at contemporary banking theory helps explain this lack of interest in alternative banking but, ironically, also suggest that core ideas from banking theory may nonetheless clarify certain competitive advantage of alternative banks. First, modern theories of banking in the 1960s ignored alternative banks because they sought to go over neo-classical theories of fractional reserve banking. The latter were primarily theories of money. Accordingly, banks remained a sideshow to monetary authorities as simple cogs in the money multiplier. Banks were seen as money creating entities with no significant contribution to the economy. The "new view" in banking theory thus emerged as a reaction against this "pure theory of fractional reserve banking" (Towey, 1974). These new approaches (Tobin, 1963; Gurley & Shaw, 1960) made two key arguments. First, they rejected what Tobin called the mystique of money. For Tobin, substitutability (from the borrowers' point of view) between financial

¹⁵ The following sections build on Butzbach and Mettenheim (2014).

¹⁶ As Rasmussen put it 25 years ago: "the difference between mutual and stock banks lies in who controls the bank and receives the profits" (Rasmussen 1988, p. 395).

assets required the rejection of money as special. Second, Tobin and others argued that banks are firms with specific corporate goals: "Bank-created 'money' is a liability, which must be matched on the other side of the balance sheet. And banks, as businesses, must earn money from their middleman's role" (Tobin, 1963, p. 416).¹⁷ Modern theories of banking thereafter emphasized that bank assets and liabilities were shaped by the strategies of bank managers to maximize returns from lending and interest rates on deposits (Tobin, 1982; Santomero, 1984). Lending was thus seen to be determined by the marginal returns of assets over the cost of liabilities (Klein, 1971).

New theories from Tobin, Gurley, and Shaw sought to reinstate a more realistic view of banking within monetary theory; their primary focus was not to offer a better understanding of banks per se. Banking theory developed, therefore, as a secondary endeavor and largely followed two parallel theoretical tracks. First, Tobin was a Keynesian and his monetary theory was neo-Keynesian. However, his, and other, new views of banking applied old assumptions from neo-classical theories of the firm to banks and financial institutions (utility maximization and self-interest taken, in turn, of course, from neo-classical assumptions about individuals). Second, banking theory explained banks in terms of their functions in financial systems of money-based economies. Tobin extrapolated from the monetary role of banks with a portfolio approach: "the essential function of financial intermediaries [...] is to satisfy simultaneously the portfolio preferences of two types of individuals or firms" (1963, p. 411).

Research in banking theory and financial economics has since retained the assumptions of mainstream firm theory to elaborate specific functions of banks (Fama, 1980a; Diamond & Dybvig, 1983; Baltensperger, 1980; Wray, 2013). This approach to banks as multi-function, profit-maximizing firms has distanced banking theory from institutional and organizational approaches in other disciplines. In their landmark synthesis, Bhattacharya and Thakor (1993) suggest that banks fulfill two key functions in modern financial systems: brokerage services and qualitative asset transformation. By focusing on banks as intermediaries between investors and capital markets, contemporary banking theory has largely ignored, in peril, traditional views of how banks manage maturity

¹⁷ As a reviewer pointed out, Tobin's ideas reflect a very reductive "balance sheet approach" to the banking firm, i.e. one that conceives assets and liabilities as marketable securities and sees the banking firm as a mere portfolio of such assets and liabilities. We completely agree with this critical assessment of the "new view". But our purpose here is precisely to highlight the limitations of contemporary banking theory by questioning its core assumptions - while retaining certain arguments within this overall questionable framework that may usefully explain certain aspects of alternative banks' competitive advantage.

transformation.¹⁸ In contrast, we return to traditional conceptions of banks (as deposit-taking and loan-making institutions that must balance assets with liabilities) to reject the idea that financial intermediation allows market-based banks to manufacture and manage assets above and beyond traditional capital reserve levels that have long been seen as necessary to cover possible losses from risks.

For contemporary banking theory, market efficiency implies that price signals from capital markets may replace soft information and relationship banking embedded in social and political institutions. An institutional theory of alternative banking suggests, to the contrary, that competitive advantages arise from traditional balancing of liabilities and assets that permit maturity transformation through size, scale, confidence, organizational reputation, internal monitoring, and supervision (that averts excessive risk-taking and opportunistic marketing and sales) and, in the past, guarantees from mutual arrangements or government entities. This differs from the core concept of qualitative asset transformation in contemporary theories of banks as financial intermediaries that focus on how bank loans retain different risk profiles than the liabilities issued by banks to make those loans (Diamond & Rajan, 2001). Recent research shifts from relational to transactional views of banking (Boot & Marinč, 2008) and the integration of banks and markets (Boot & Thakor, 2010), but focuses on functions of brokerage and asset transformation that assume neo-classical theories of the firm and see banks as intermediaries between investors and capital markets.19

Two significant developments in contemporary banking theory emerged in the 1970s: one emphasizing market failures, another focusing on changes in governance by banks driven by shareholders.²⁰ The literature on market failures in banking retains core assumptions about market efficiency. And studies of bank governance retain core assumptions about the virtues of shareholder-based governance in mainstream theories of the firm. However, both nonetheless help identify several competitive advantages of alternative banks, especially if supplemented with findings from past research on non-profit banks and credit institutions.

¹⁸ The authors thank Yuri Biondi for suggesting this critical point.

¹⁹ However, in analyzing this shift in behavior, economists ignore the important role of topdown regulatory reforms and changes in accounting standards. Thanks to an anonymous referee for this useful comment.

²⁰ The authors thank Yuri Biondi for this synthesis of turns in banking theory and their importance for rethinking alternative banks from an institutional perspective.

The turn to market failures in banking theory focused on information asymmetries (see Leland and Pye, 1977). For Boot (2000, p. 8), the theory of information asymmetries helps distinguish "modern theories of financial intermediation from the earlier transaction costs-based theories". From this perspective, banks exist because "intermediation is a response to the inability of market-mediated mechanisms to efficiently resolve informational problems" inherent to financial transactions (Bhattacharya & Thakor, 1993, p. 14). The specificity of banks is then in the type of contractual mechanism used to solve information asymmetries. While for Tobin (1963; 1982), banks helped decrease transaction costs through the pooling of risk, modern theories insist on the informational advantages of banks over markets as critical to reduce credit rationing (Stiglitz & Weiss, 1981). Banks were thereby seen as delegated monitors able to reduce the cost of monitoring borrowers incurred by lenders/depositors (Diamond, 1984). From this perspective, banks undertake relationship lending to decrease information asymmetries and avert the consequences of information asymmetries on credit relationships: adverse selection and moral hazard (Boot, 2000; Petersen & Rajan, 1994).

These views of market failures, banks as intermediaries, and relationship lending help clarify the competitive advantages and broader importance of alternative banks. Caution is in order here because, despite profound advances in this influential area of contemporary banking theory, one cannot dispel the impression that organizational and institutional aspects of banking remain underestimated or ignored. Contemporary banking studies rely on default theories of the modern firm, mostly based on neo-institutional theories of the firm (agency theory and property rights theory). Since 1970, banking theory has evolved as a sub-discipline of financial economics wedded to conceptions of financial market efficiency, neo-classical economics and models of dynamic stochastic general equilibrium. Meanwhile, traditional conceptions of banking and institutional approaches increasingly appeared anachronistic, as marketbased banking came to dominate the industry and lawmakers amidst deregulation, privatizations, demutualization, disintermediation, and financialization. With notable exceptions such as Minskyian theories of financial instability, critical approaches in political economy, and regulation approaches, banking studies focused on a limited set of questions about market failures, the importance of law (basically the protection of creditors) and agency theories of ownership and governance in joint-stock banks (ironically, just as private equity firms and other forms of ownership grew as alternatives in response to problems with shareholder-based governance).²¹

²¹ We thank Yuri Biondi for suggesting this focus on how alternative banks counter market failures.

The following sections mirror the trajectory of contemporary banking theory by first drawing on agency theory, then turning to theories of intermediation and asymmetric information to explain the competitive advantages and systemic importance of alternative banks. These approaches present important flaws and make disputable theoretical assumptions. However, because they have largely shaped debates about bank performance in the academic literature, they provide a necessary point of departure for our analysis. Moreover, ironically (given the bias of contemporary banking theory toward private ownership), both agency theory and intermediation theory nonetheless provide important, if limited, explanations of the competitive advantage of alternative banks found in the empirical evidence discussed above. The limits of these two approaches inform our turn to heterodox views of how firms acquire and maintain institutional foundations of competitive advantage, approaches that provide both more compelling explanations of recent empirical findings about alternative banks and greater promise for development of alternative banking theories.

7 Alternative banking and agency theories of shareholding and market discipline

Most comparisons of bank performance are informed by concepts and measures from agency theory that emphasize shareholders, contractual control, and market discipline of management. From this perspective, the efficiency of banks depends on their ability to mitigate potential agency conflicts. As noted, mainstream theories of the firm have remained the explicit (Fama, 1980a, 1980b) or implicit bases of contemporary theories of banking since the 1960s. Comparative analyses of bank shareholding structures in the 1990s (which set the terms for current debates on government vs private banking) also made extensive use of agency theory (Altunbaş et al., 2003). Indeed, the dichotomy between "stakeholder-oriented" and "shareholder-oriented" banks (Coco & Ferri, 2010) suggests the primacy of governance and shareholding issues in this literature.

While the distinction between stakeholder and shareholder governance in banking is not questionable *per se*, the following problems remain: (1) the explicit or implicit adherence to mainstream neo-classical theories of the firm in most discussions of the advantages of public or mutual vs private shareholding/control; (2) the implicit assumption that shareholding and governance are the key characteristics that distinguish alternative banks from private banks; this ignores other critical differences emphasized herein.

Studies of non-profit firms help compensate for the first problem in comparative studies of banking. While economic thinking about non-joint-stock forms of organization has evolved since the dismissal of mutuals as more conducive to shirking by managers in Alchian and Demsetz (1972),22 biases toward joint-stock ownership remain pervasive. The core ideas of agency theory and property rights theory (often conflated in modern theories of the firm) were set by Alchian and Demsetz (1972, 1973) and Jensen and Meckling (1976) and developed (Fama, 1980b; Fama & Jensen, 1983a, 1983b; Hart & Moore, 1990) on the same basic premises, especially the assumption that certain organizational forms are better than others in reducing transaction costs. Alchian and Demsetz saw modern firms as able to solve problems of measurement of marginal productivity in the context of team production (1972, 1973). Given the need to monitor the behavior of team members, but the difficulties of assessing individual behavior (given information asymmetries and cognitive limitations) and choosing the right monitors (and monitoring the monitor), early theorists focused on the bearer of residual risk; the residual claimant, a.k.a. the shareholder (Fama & Jensen, 1983a, 1983b). This is the theoretical basis for asserting the superiority of shareholder-oriented corporate governance, leading some to predict convergence, over time, of all organizations toward this form of ownership (La Porta et al., 2002; Hansmann & Kraakman, 2000).

To the contrary, theory and evidence from research on non-profit firms suggests that the business models of alternative banks (based on sustainable returns for longer term horizons, stakeholder-oriented governance, and social or public policy missions) are better able to reduce agency costs to retain competitive advantages over private banks. The next two sub-sections develop this argument in more detail.

7.1 Manager-shareholder agency conflicts

Agency conflicts arising from the separation of management from ownership remain at the center of theories of the firm and analyses of bank governance. Concepts such as rent-seeking and expense-preference behavior (Fama & Jensen, 1983b; Hart & Moore, 1990) suggest that dispersion of shareholding allow managers to pursue their own interests. Indeed, monitoring and

²² This all boils down to the absence of shareholders in mutuals, according to Alchian and Demsetz: "In nonprofit corporations, [...] the future consequences of improved management are not capitalized into present wealth of stockholders. [...] One should, therefore, find greater shirking in nonprofit, mutually owned enterprises" (Alchian & Demsetz, 1972, p. 790).

controlling managers and designing incentives to align the interests of shareholders and managers can be very costly. Managers may also capture free cash flows generated by the firm. Free or uncommitted funds may lead managers to invest in unprofitable projects (Jensen & Meckling, 1976). Cooperative banks, government banks, and private banks all face conflicts of interests between owners and managers. However, agency costs for alternative banks can be said to be lower than in private, joint-stock banks. Indeed, for Hansmann (1996), the opportunism of managers in joint-stock firms in the nineteenth century helps explain the rapid growth of mutual forms of banking organizations in North America.

This runs counter to arguments by Rasmussen (1988) about mutual banks, by Mayers and Smith (1994) on mutual insurance firms, and by LaPorta et al. (2002) on government banks. Arguments favoring joint-stock ownership and shareholder governance run as follows (Ayadi et al., 2010): (i) stakeholderbased banks have more autonomous managers than shareholder-based banks (so they incur higher agency costs); (ii) stakeholder-based banks cannot rely on market mechanisms to reduce agency costs; and (iii) stakeholder-based banks cannot reduce agency costs with the tools used by private, joint-stock companies (such as stock options and other pay-for-performance schemes).

The question of manager autonomy at alternative banks is complex. According to agency theory, diffuse ownership increases managerial autonomy and weakens controls on self-interested managers. 23 Mutual banks and cooperative banks do indeed have more diffuse ownership because the "one member one vote" principle impedes accumulation of voting power as in joint-stock banks: "the [mutual] manager is freed not by the absence of concentration, but by the absence of the threat of concentration" (Rasmussen, 1988, p. 397). However, recent research on stakeholder governance at German local savings banks demonstrates that corporate boards with representation of stakeholders tend to exercise greater control over executives and managers in comparison to joint-stock banks (Hackethal, Schmidt, & Tyrell, 2005).

From the perspective of agency theory, government savings banks and special purpose banks can be said to have a smaller number of stakeholders with higher stakes in the bank – typically local, regional, or national governments and representatives from political and social forces that sit on corporate boards. This runs counter to an axiom of property rights theory (which inspires much of the work on agency conflicts): That public ownership is much less apt than private

²³ By contrast, diffused ownership was seen by Berle as a good thing since it broadens the range of stakeholders involved in the firm's organization and allows firms to pursue general interest goals as well. See Weinstein (2012). Thanks to an anonymous referee for pointing that out.

ownership at creating incentives for the monitoring of managers. For Shleifer (1998, p. 135), "private ownership is the crucial source of incentives to innovate and become efficient" while state ownership leads to "grotesque failure" given the (supposed) utility function of politicians to maximize patronage and personal income. Such distortions of principal-agent relations (and profit maximization in politics and public policy) arise from presumed weak and perverse incentives in public shareholding and regulation (Grossman & Hart, 1980; Fama & Jensen, 1983a). For Kane, "short-horizoned authorities can allow banks to snatch wealth surreptitiously from taxpayers and simultaneously require loan officers to pass some or all of the wealth that is snatched to a politically designated set of favored borrowers" (Kane, 2000, p. 161). Criticism of government bank management predominates in neo-institutional theories of corporate governance (Shleifer, 1998; Shleifer & Vishny, 1997) and the ownership rights literature (critically appraised in Weinstein, 2012). Cornett et al. (2010) claim that state-owned banks perform worse than privately owned banks citing Shleifer and Vishny (1997) and Kane (2000) to assert that perverse incentives reign when state bureaucrats run financial institutions. Dinç (2005) and Micco et al. (2007) also claim that politics influence state-owned banks and bias lending policies. Regulators, add Barth, Caprio, and Levine (2006), are no "angels". One may add that regulators are not necessarily "devils" either. The negative views of state actors so pervasive in the neo-institutional economics literature on banking (which informs a good part of banking studies) are wrong, for several reasons: because homo politicus is not homo economicus; because free markets and joint-stock ownership are not necessarily optimal; because reported correlations are usually spurious (aggregate data used to condemn state banks conceal rather than reveal causes); and, as far as emerging countries are concerned, because authoritarian governments are most responsible for mismanagement at state banks rather than rent-seeking politicians in democratic times. They further neglect central banking coordination, supervision, and control as a mode of public policy and general interest intervention with reduced political interference.

Cooperative banks and mutual savings banks lack shareholders. However, they have members and stakeholders. Cuevas and Fischer (2006) argue that "expense preferences" (the propensity of managers to invest in costly projects regardless of their contribution to the firm) constitute the main source of failure for cooperative bank managers; and the dilution of membership, they say, aggravates this problem. Cooperative bank managers also face multiple stakeholder constituencies (Cuevas & Fischer, 2006): members, employees, net borrowers, net savers, public authorities, and political and social forces. However, Fama and Jensen (1983a) argue that boards with outside directors may control management - even in non-profit firms.

A third source of potential conflicts between managers, members, and stakeholders in cooperative banks and mutual savings banks arise from the weak incentives presumably inherent to non-private ownership (as mentioned above in the case of government banks). Cooperative members are not the same as private bank shareholders: their degree of control is unrelated to the size of their equity stakes, and they cannot buy or sell equity on the market.

Cooperative bank equity is therefore different. Indeed, cooperative bank equity can be seen as an intergenerational endowment that does not belong to anyone (Fonteyne, 2007). From this perspective, managers of cooperative banks can be considered as custodians of the endowment, reducing member incentives to exert effective oversight over management which raises a series of governance problems (Fonteyne, 2007). However, specific governance structures in cooperative banks may discipline managers in a collective fashion that differ from the individual, bottom-up incentives, and preferences that are assumed by agency theories of corporate (and bank) governance.²⁴

In sum, alternative banks either face *fewer* potential agency conflicts or manage owner-manager agency conflicts differently but as well or better than joint-stock banks. This counter two core assumptions in banking studies: (i) that shareholderoriented banks face fewer owner-manager problems and that (ii) private ownership and market mechanisms provide the best incentives for controlling agents.

Alternative banks have developed different mechanisms to reduce ownermanager agency conflicts through monitoring, control, and incentives. Compare these mechanisms to those emphasized in accounts of corporate governance in joint-stock banks. New-institutional economics suggests that joint-stock banks rely on two key devices to lower agency costs: market discipline and contracts inside the bank that provide incentives able to align the interests of managers with those of shareholders. Market discipline turns on the right of shareholders to sell their shares and organize corporate takeovers to change management.²⁵

²⁴ This point was kindly suggested by an anonymous reviewer.

²⁵ Market discipline remained at the core of bank regulation in the 1990s. For instance, in the Core Principles for Effective Banking Supervision published by the Basel Committee on Banking Supervision (1997): "Supervisors should encourage and pursue market discipline by encouraging good corporate governance and enhancing market transparency and surveillance" (p. 8). In a similar vein: "I also believe that we ought – where we can – to skip the middlemen and go right to our first line of defense: market discipline. By aligning market incentives with regulatory incentives, policies designed to harness market forces could complement bank supervision by encouraging banks to refrain from excessive risk-taking". "Market Discipline as a Complement to Bank Supervision and Regulation", Remarks by Governor Laurence H. Meyer, Before the Conference on Reforming Bank Capital Standards, Council on Foreign Relations, New York, June 14, 1999, www.federalreserve.gov/boardDocs/Speeches/1999/19990614.htm.

Moreover, in shareholder-oriented banks, value added is appropriated by external shareholders who may demand increased dividends and share buybacks to solve the free cash flow problem (Jensen, 1986). This is at the core of the shareholder value maximization paradigm which has remained dominant in corporate finance theory and practice since the 1980s (Hansmann & Kraakman, 2000).

Alternative banks cannot rely on these market mechanisms to discipline managers from outside the banking firm. However, it does not follow that alternative banks are less able to discipline managers (Fonteyne, 2007). First, Cen, Dasgupta, and Sen (2013) show how takeover threats may actually damage the standing of private bank managers. Second, alternative banks have developed their own external monitoring and controlling devices. Third, if government-owned banks are politically controlled (Shleifer & Vishny, 1998; Dinc, 2005), this implies that governments and other stakeholders exert more, not less control over bank managers in comparison to shareholders of joint-stock banks. Fourth, while Bhattacharya and Thakor (1993) emphasize the lack of secondary markets for residual claims in non-private banks (to support their hypothesis of greater efficiency at privately owned banks), Ayadi et al. show, building on the work of Fama and Jensen (1983a, 1983b), that the equity held by cooperative members is indeed redeemable on demand. Exit is thus a powerful device to discipline managers in cooperative banks, too. It is especially strong as cooperatives usually cannot sell new equity on capital markets to counter the threat of exit from equity holding members. The absence of markets for cooperative equity makes exit from cooperatives more effective as a device for disciplining managers.²⁶

Cooperative banks and savings banks also rely on another powerful external device for disciplining managers: two-tiered networks.²⁷ The historical section above describes how local and regional cooperative banks and savings banks created second-tier entities for giro payments and transfers, wholesale banking, insurance products, investment banking, and capital market operations. These shared²⁸ second-tier finance groups provide back-office support and specialized subsidiaries able to offer services through independently owned and managed local and regional banks. In the past, they supplied joint-liability and cross-

²⁶ We thank an anonymous reviewer for this observation; in cooperatives, exit through redemption replaces market exit.

²⁷ This organizational structure is both a network - in a sense of a horizontal structure composed of autonomous entities - and a two-tiered structure (with apex institutions and specialized subsidiaries).

²⁸ Sharing seems a form of contractual cooperation specific to alternative banks.

guarantee schemes to increase network stability.²⁹ Most important here, however, are the monitoring and control functions fulfilled by second-tier organizations.³⁰ Second-tier finance groups serve as apex institutions that exert pressure to avert abuse of free cash flows, limit the ability of managers to appropriate the patrimony of banks, and bring peer pressure to control and discipline managers of regional and local cooperative banks (Fonteyne, 2007; Guinnane, 1997, 2001). Cooperative networks also constitute joint-supply alliances that reduce the uncertainties of resource procurement, a rarely considered but important potential *locus* of agency conflicts (Desrochers & Fischer, 2005; Cuevas & Fischer, 2006).

In sum, alternative banks rely on devices of external control and monitoring that may discipline managers at least as effectively as the market mechanisms central to shareholder-based governance of joint-stock banks.

What about internal devices? Joint-stock banks use contractual devices to reduce potential agency conflicts between shareholders and managers. The literature on corporate finance and agency theory argues that contracts may align the interests of managers and shareholders (Jensen & Zimmerman, 1985). From this perspective, performance compensation schemes increase the interest of executives in the price of firm's shares (for example, through stock options). Fonteyne (2007) and Cuevas and Fischer (2006) note that these devices are not available to cooperative (or public) banks. Rasmussen calls "perks" the "difference between a mutual managers compensation and his market wage" (Rasmussen, 1988, p. 398). The use of perks in the mutual industry is also presented as a key weakness of cooperative governance by Fama and Jensen (1983b) and Deshmukh, Greenbaum, and Thakor (1982). From this perspective, since perks are capped and unrelated to the individual performance of managers, mutual managers have weak incentives to increase risk and profits.³¹

These arguments are seriously flawed. Prior to the global financial crisis of 2007–2008, evidence about the effectiveness of pay-for-performance schemes (and, especially, stock option plans) in mitigating agency conflicts was, at best, mixed, confirming skepticism about whether stock options would serve as incentives to maximize shareholder value (Polo, 2007; John & Qian, 2003; Bebchuk & Fried, 2003). Evidence from, and since, the 2007–2008 crisis is more definitive: Top bank managers with multi-million stock option plans

²⁹ European community regulations required local and regional German Sparkasse savings to end cross-guarantee schemes as unfair competition by 2005.

³⁰ German cooperative banks first developed regional institutions in the nineteenth century for the specific purpose of performing auditing and monitoring functions (Guinnane, 1997).

³¹ Interestingly, risk and profits present no problem in Rasmussen's work.

repeatedly endangered their banks by pursuing risky high-yield strategies (Sorkin, 2010). In fact, executive pay schemes at large joint-stock banks has become a key political issue in the aftermath of crisis.

It follows that the lack of these contractual devices does not impair alternative bank capacity to reduce agency conflicts between owners and managers. Indeed, because such payment schemes are often very costly and may actually induce excessive risk-taking by managers, alternative banks may be better off without them.

Moreover, alternative banks rely on different mechanisms to discipline managers. The broader social and public policy mandates of alternative banks underlie different corporate cultures that provide incentives for managers to perform more responsibly and more effectively. For Fonteyne (2007), the loyalty of employees and depositors is an important source of competitive advantage for cooperative banks. Finally, on a cautionary note, the agency costs of delegated management might be, as Hansmann argues, "at best of secondary importance when determining which organizational forms are viable" (Hansmann, 1996, p. 4).

7.2 Other agency conflicts

Studies of banking reveal other potential agency conflicts besides that between shareholders and managers, such as conflicts between shareholders and debt holders and depositors. Asset substitution theory suggests that equity holders have greater incentives to take risks for gains than debt holders or depositors who bear greater losses (Leland, 1998). Alternative banks are clearly less prone to this problem, having no (or majority) shareholders in the case of government banks, or having holders of non-transferable equity stakes in the case of cooperative banks (Ayadi et al., 2010; Drake & Llewellyn, 2001). While this point is acknowledged by Rasmussen, he diminishes its consequences for his claim that mutual banks are less efficient than joint-stock banks by bringing up the issue of diverse views among mutual bank depositors; such that only "independent" managers picked by shareholders could guarantee a "cautious investment policy" (Rasmussen, 1988). But this contradicts his assertion that managers in mutual banks are more risk-adverse than peers in joint-stock banks. And the argument becomes self-defeating when he brings in another group, different from bondholders and depositors: shareholders, who obviously have their own interest and whose differences from bondholders (and bank depositors) are the source of this agency conflict in the first place.

In sum, contrary to views of managers and depositors in contemporary banking research, "the managers of investor-owned firms are much more willing to speculate with their depositors' funds than are the managers of customerowned and non-profit firm" (Hansmann, 1996, p. 263). The non-profit missions of alternative banks can therefore be seen as central to mitigating opportunistic behavior by managers.³²

Agency theory also emphasizes conflicts between bank depositors and borrowers. Indeed, theories of delegated monitoring assume that banks form as coalitions of depositors wishing to reduce the cost of monitoring borrowers (Diamond, 1984).³³ Accordingly, borrowers and depositors have opposing interests. Depositors tend to be risk-adverse and display a high preference for liquidity, while borrowers are risk prone and less concerned by liquidity.³⁴ While banks cannot eliminate this agency conflict, they may reduce its costs. Evidence and theory suggest that alternative banks incur *lower costs* than jointstock private banks from agency conflicts between depositors and borrowers. First, cooperative banks and mutual savings banks align the interests of debtors (depositors) and borrowers: members are both owners and depositors; while borrowers usually must be both (Valneck, 1999). For Cuevas and Fischer (2006), agency conflicts may arise in cooperative banks between net borrowers (members whose borrowing exceeds personal deposits) and net lenders (the opposite). But this conflict is much more benign than conflicts between depositors and borrowers in joint-stock banks. First, net borrowers in a cooperative bank still have a vested interest in the sustainability of their bank over time; not only because they are bank members, 35 but also because most cooperative bank borrowing takes place over a long period of time – it is relation-based rather than transaction-based. Second, peer pressure from cooperative bank members and stakeholders in the local community reduces this conflict (Ghatak, 2000).

In government savings banks and special purpose banks, investors also retain different interests than borrowers. However, agency conflicts are attenuated here because government officials (as "investors") have different profiles and degrees of risk aversion than private investors. For example, local and regional government savings banks and regional and national special purpose

³² We thank an anonymous reviewer for raising this point.

³³ As remarked by an anonymous reviewer, this view assumes that (i) depositors are investors and (ii) deposits pre-exist to banking, both assumptions which are equally questionable. We agree, but our point here is precisely to show how the existing works on alternative banks purport to explain their feature/behavior/performance within an inappropriate conceptual framework.

³⁴ This asymmetry between shorter term liabilities and longer term assets also lies at the root of the theory of banks as liquidity creators, which is discussed below in relation to risk-taking. 35 Actually, some net borrowers could gain more from refusal to pay back loans than they could lose from the coop banks failure, which looks like the problem afflicting common goods.

banks usually specialize in public finance and policies such as social housing programs. Because managers of public banks act in the public sphere in the public interest, they have fewer incentives and fewer opportunities to betray the interests of stakeholders. Tighter links between stakeholders and managers and greater prerogatives of control exercised by corporate boards suggest that alternative banks are central for coordination that is seen as the critical characteristic of advanced coordinated market economies and developmental states (Mettenheim, 2010; Vitols, 2005; Hackethal et al., 2005; Hall & Soskice, 2001). Government banks also have explicit missions to reach and serve clients such as unbanked lower income households and small and medium enterprises that cannot access capital markets and are often shunned by private banks. Lowincome clients and small and medium enterprises may present greater risk and, therefore, involve higher monitoring costs; but agency conflicts and costs are lower.

The corporate cultures of alternative banks also reduce agency conflicts between members and managers by providing different incentives than jointstock banks. Social and public policy missions, and payment and career schemes without incentives to maximize short-term profits through excessive risk, produce distinctive management cultures and behavior at alternative banks. As Rasmussen emphasizes, "what is important in a savings bank is not so much altruism as stability and conservatism" and "an altruistic manager devoted to buying the best high-yield, high-risk securities is worse than a riskadverse scoundrel" (1988, p. 407). Rasmussen also suggests that less complex mixes of products and services offered by a bank reduce potential agency conflicts between managers, stockholders, and bondholders. This applies to the more focused missions of alternative banks.

Finally, the costs of agency conflicts between depositors and bank managers tend to be substantially lower in alternative banks because of the higher level of trust placed in these institutions by clients and the general public (Größl, von Lüde, & Fleck, 2013). As Bhattacharya and Thakor note, "what makes the mutual form the preferred structure is that it resolves the classic shareholder deposit conflict regarding the appropriate level of risk" (1993, p. 15). This is especially true in times of crisis. In hard times, state-owned banks are considered "safe and better banks" (Dietrich & Wanzenried, 2011, p. 321). The greater trust of depositors and the general public in alternative banks is due to their long history, local rooting, stakeholder-oriented governance, and corporate reputations based on social and public policy missions. In the past, (usually government) guarantee of small deposits at savings banks were critical for development of this trust. Indeed, amidst crisis, depositors often shift funds to public savings banks reinforcing both the pro-cyclical weaknesses of private banks and the countercyclical liability base of government savings banks (Schclarek-Curutchet, 2014; Mettenheim, 2010).

In sum, agency theory and studies of non-profit firms help explain several competitive advantages of alternative banks in terms of governance and control (see also Marsal, 2013).³⁶ However, critics of mainstream theories of the firm (Biondi, Canziani, & Kirat, 2007; Weinstein, 2012) rightly suggest that agency theory is *not* the best approach to analyze the performance, stability, or survival of firms, including banks. Indeed, theories that define firms as a bundle of contracts, without any institutional or organizational existence beyond legal form (Weinstein, 2007), may engender a self-fulfilling prophecy; managers under the sway of this view in the US were found to focus on incentives in their contracts in detriment to the well-being of their firms (Lazonick, 2010).³⁷ The broader point, as Berle and Means emphasized over 80 years ago, is that the "traditional logic of ownership" that underpins agency theory today fails to account for the realities of shareholder involvement in large corporations (Berle & Means, 1932; Berle, 1965; Biondi et al., 2007).

Agency theory thus falls far short of capturing the complexity of modern economic organizations, especially banks and, most especially, alternative banks. As Biondi argues, "rather than the so-called 'ownership structure' of the firm, it is the enduring existence and financial viability of the whole firm that is fundamental" (Biondi, 2007, p. 252). The comparative analysis of bank performance cannot be limited to questions of ownership and control. Governance matters. However, alternative banks differ from private banks in three further critical ways: by their long-term horizons based on sustainable returns and lower risk profiles, their local rooting that permits effective relational and retail banking, and their core social and public policy missions. These characteristics of alternative banks cannot be understood within the framework of agency theory. To better describe the institutional foundations of competitive advantage in alternative banking, we expand our analysis in the following sections: first to consider concepts about market failures in contemporary banking theory; then to consider heterodox theories of the firm.

³⁶ It is ironic that, before the 2007–2008 crisis, Fonteyne (2007) highlighted the risks posed by cooperative bank governance in terms of empire-building and appropriation risks, which were subsequently found to be so pervasive among private banks.

^{37 &}quot;An integrated hierarchical reward structure ceased to regulate the pay of top executives, who embraced wholeheartedly the ideology of maximizing shareholder value as their boards bestowed on them ever more generous stock-option awards" (Lazonick, 2010, p. 684).

8 Alternative banks mitigate information asymmetries through relationship banking

For contemporary banking theory, information asymmetries produce market failures and explain a variety of phenomena in banking. Knowing more than creditors, borrowers may behave opportunistically to produce moral hazard, increase credit risk, and erode assets with non-performing loans. Lack of information about clients or neighborhoods may, in turn, produce adverse selection through credit rationing by loan officers (Stiglitz & Weiss, 1981). One way to reduce information asymmetries and redress market failures is relationship banking. Boot defines relationship banking as "the provision of financial services by a financial intermediary that: (i) invests in obtaining customer-specific information, often proprietary in nature, and (ii) evaluates the profitability of these investments through multiple interactions with some customers over time and or across products" (2000, p. 10). Relationship banking improves the exchange of information and contracts between banks and borrowers, increases credit supply (Petersen & Rajan, 1994), and reduces collateral requirements and costs arising from financial distress (Hoshi, Kashyap, & Scharfstein, 1990).

Alternative banks are uniquely positioned to reap the competitive advantages of relationship banking. Cooperative banks and savings banks are much closer to clients (depositors and borrowers) because of their small size, local rooting and extensive branch networks. Soft information gathered over time in proximity with customers is a key source of competitive advantage for alternative banks over private banks, that increasingly screen and monitor clients with poor information from standardized aggregate databases (Ayadi et al., 2009, 2010; Fonteyne, 2007; Cuevas & Fischer, 2006). Carnevali (2005) argues that local branch offices, organizational networks and lending discretion provide European savings banks with competitive advantages and make these institutions better able to provide counter-cyclical lending to help small and medium enterprises through economic downturns. This runs counter to Fonteyne (2007) who argues that large branch office networks increase fixed costs just as many new products and services do not require them (suggesting that local branch offices should lose relevance in the near future). Theories of relationship banking suggest the contrary. The strategy of retail-oriented alternative banks to add, rather than eliminate branch offices, also suggests that branch office networks are a key investment to sustain competitive advantage. Moreover, the branch office networks and relationship banking of alternative banks are key for operating in markets (such as lending in low-income areas) where information asymmetries discourage joint-stock banks (McGregor, 2005; McKillop & Wilson, 2011; Mettenheim, 2010).

The proximity of alternative banks to customers reinforces relationship banking and trust through implicit contracts with communities. For Kay (1991), "the special value of mutuality rests on its capacity to establish and sustain relationship contract structures." Mutual banks and cooperative banks thereby retain competitive advantages over private banks in terms of establishing and maintaining trust (Kay, 2006). Trust is also sustained by by the way public banks and cooperative banks distribute returns. While the returns of joint-stock banks are appropriated by external shareholders, alternative banks distribute returns to customers and members through cheaper loans or better interest rates paid on deposits (Ayadi et al., 2010). This reinforces the inter-temporal risk smoothing capacity of alternative banks discussed below. The social missions and corporate cultures of alternative banks also lead them to distribute significantly more returns to social and cultural projects in local communities than the limited strategic use of corporate social responsibility programs at private banks.³⁸

Because members and clients of credit unions and mutual banks tend to belong to employment groups or limited geographical areas, they are also more homogeneous and cohesive than private bank clients (Hansmann, 1996). Credit unions and mutual banks therefore are less likely to face adverse selection and moral hazard and are better able to mitigate counterparty risk than private banks (Hart & Moore, 1990). Some argue that such benefits are limited to small-scale banks specialized in less complex operations (Akella & Greenbaum, 1988; Rasmussen, 1988; Berlin & Mester, 1998). However, the unique two-tiered structure of many local and regional savings banks and cooperative banks that share wholesale banking divisions enables alternative banks to retain the best of both worlds.

The advantages of small size, local rooting, and extensive branch network can be maintained while shared operations help achieve economies of scale. Fonteyne (2007) argues that cooperative banks have lost their traditional ability to overcome opportunistic behavior by borrowers (because of the increased size and growing distance between cooperative banks and members; and because contracts have become more enforceable by commercial banks). We disagree. Cooperative banks and savings banks, very early in their history, developed a solution to this trade-off between relationship banking and economies of scale: two-tier retail—wholesale networks. Such structures are discussed above as a solution to several agency problems in banking; they also solve trade-offs between relationship banking and economies of scale. Networks encourage economies of scale, enhance bank funding opportunities, and may reduce the volatility of performance (Ayadi et al., 2010; Cuevas & Fischer, 2006).

³⁸ We thank an anonymous reviewer for suggesting this point.

Two-tiered networks may also help alternative banks avoid pitfalls of vertical integration. Fama and Jensen (1983b) argue that the expense preferences of managers increase with institutional size, but less so in networks. Alternative bank networks also expand the range of products and services offered by local banks, which reinforces relationship banking (Boot, 2000; Degryse & Van Cayseele, 2000). Two-tiered networks may increase "appropriability hazards", basically a free-rider problem that arises from new agency conflicts within networks (Ayadi et al., 2010; Desrochers & Fischer, 2005). However, given the long history of wholesale operations shared by local and regional cooperative banks and savings banks, these hazards seem to have been mitigated by network integration, peer pressure, and corporate cultures as emphasized above.

In sum, cooperative banks and savings banks retain unique two-tier structures that combine independent local and regional retail banking institutions and shared wholesale operations. This provides significant advantages in terms of economies of scale while preserving and deepening retail relationship banking.

9 Alternative bank funding, equity, reserves, and patrimony

Alternative banks also fund operations, manage equity, and hold reserves and patrimony in ways fundamentally different than joint-stock and private banks. In Section 3, we sketched how cooperative banks and savings banks gradually accumulated equity and reserves that serve as capital buffers, but also represent the accumulated patrimony of the institution. Without pressures to pay dividends to shareholders, cooperative banks and savings banks are freer to use retained profits for funding. Development banks and special purpose banks may receive equity endowments or deposits of government funds, public sector pension funds, or public savings funds. These various sources of funding provide alternative banks with competitive advantages over private banks and comparative advantages for social and public policy. This counters core ideas about financial repression. From the perspective of financial repression, the lower cost of capital enjoyed by special purpose banks crowds out private bank finance and distorts capital market prices. However, given the severity of fiscal constraints on governments, state-owned banks provide a very attractive alternative for public spending. Government banks are uniquely able to multiply budget lines and improve the effectiveness of public policy implementation through monitoring and control of public investments.

Because cooperative banks face lower pressures to pay dividends than jointstock banks, they may better mobilize and retain capital to reach more comfortable levels of liquidity and safer deposit-to-loan ratios and become net interbank lenders (Fonteyne, 2007). Lower pay-out ratios mean that cooperative banks (and public savings and special purpose banks) "can enjoy rapid growth in their capital base and therefore fast organic growth" (Fonteyne, 2007, p. 47). Altunbas et al. (2001) suggest that the superior performance of cooperative banks and public banks over private banks can be explained by lower funding costs due to their different deposit bases (and "less interest rate sensitive" retail customers). In the past, cooperative banks and mutual savings banks were less able than joint-stock banks to raise external capital through sale of new equity. However, the specialized finance groups of savings and cooperative banking networks access capital markets with investment grade ratings equal to or better than the best private banks.³⁹

In a promising line of research, Giannola (2009) argues that because alternative banks have accumulated greater capital reserves through more cautious, longer term policies to cover losses, these institutions retain a "patrimonial advantage" during transition to Basel II and III accords. Before the crisis, Fonteyne (2007) predicted that the cost of capital for banks would decrease to the point of becoming irrelevant as part of the total cost of providing retail financial services (and, therefore, as a factor of competitive advantage). To the contrary, the extremely high costs of re-capitalizing (mostly private) banks across the world since the 2007 crisis, either as regulatory requirement or as prudential strategy, suggest that access capital at low cost remains a fundamental source of competitive advantage for alternative banks.

In comparison, profit maximization imperatives at private banks set powerful incentives against the widely acknowledged need to reduce leverage and hold more secure levels of reserves against risk. Capitalization increases the denominator upon which bank returns on shareholder equity (RoE) are calculated. Although the object of reforms and good practice, deleveraging and maintaining safer levels of reserves reduces profits that are so essential for managers and shareholders of joint-stock banks. Without such pressures to maximize profits, managers of alternative banks are able to continue a tradition

³⁹ One should however cite an important caveat here: in several countries over the past decade or so, large savings and cooperative banks have been able and willing to list specialized subsidiaries and funding instruments (with a varying degree of success: see the fate of Natixis in France).

of seeing bank capital as patrimony and hold safer levels of reserves against risk.40

In sum, staggering costs arose from the excessive leverage and errors of risk management at private banks that relied on financial market efficiency. The different view of capital reserve management at alternative banks - as patrimony and institutional endowment that require prudent risk management to sustain corporate missions of social and public policy – therefore provide promising grounds for alternative banking theory.

10 The sustainable business models of alternative banks

Recent studies also underestimate how the business models of alternative banks may provide more sustainable credit relationships over time. 41 Stakeholderoriented governance, non-profit missions, social mandates, independent local

40 Essars (1896, p. 169) noted: "The Banks of Naples and of Sicily have a capital that they style 'patrimony'; that is, the property of nobody. It is a unique fact in the world's economy that there exist two establishments which play an important part in the country which they serve, and yet are res nullius." He reported "patrimony" as follows in balance sheets for Italian cooperative banks:

Assets, million lire	
Cash on hand	18.5
Loans, discounts, and advances	269.2
Public bonds and industrial securities	139.5
Miscellaneous	293.4
Liabilities, million lire	
Patrimony (capital and reserve)	118.2
Deposits of all kinds	357.7
Miscellaneous	238.3

41 Hart and Moore (1998) argue that institutions maximizing consumer surplus (and not profit), such as cooperatives, will distribute this surplus to customers through price subsidies (interest rate subsidies in the case of cooperative financial institutions). This may distort decisions and lead to inefficient outcomes. Canning et al. (2003), however, suggest that credit rationing might be a more optimal solution for distribution of consumer surpluses. In discussing the optimizing decisions of not-for-profit financial institutions, Canning et al. (2003) mention the possibility that alternative banks might have an advantage in "achieving economically efficient outcomes." In fact, they attribute this to market failures and monopoly power in general.

retail operations, and branch office networks embedded in communities create a unique set of incentives and constraints that shape alternative bank governance and performance. A loyal retail base and high level of public trust also support more sustainable business models. These characteristics of alternative banks generate greater stability in terms of membership on corporate boards and in executive and managerial positions. This, in turn, reinforces longer term strategies and more stable earnings (Bongini & Ferri, 2008). The aversion of alternative banks to short-term profit maximization contributes to better long-term performance. According to Iannota et al. (2007), risk aversion produces higher loan quality on alternative bank books.

Alternative banks also tend to concentrate activities in more traditional areas of banking. This also produces more stable sources of revenue; and lower revenue diversification helps increase systemic stability (as discussed in Section 5). In fact, lower revenue diversification "more than offsets [alternative bank] lower profitability and capitalization" (Hesse & Čihák, 2007). In addition, increased stability reduces losses from credit risk, which may explain findings of greater cost-efficiency in alternative banks (Gurtner, Jaeger, & Ory, 2002, for French cooperative banks). Lower income diversification also helps explain alternative bank performance in risk management.

In recent decades, banks have diversified away from traditional banking (collecting deposits and making loans) on both sides of the balance sheet. On the liability side, diversification and imperatives of expansion have made private banks much more reliant on external funding sources. Contemporary banking theory asserts that "deposit financing makes banks vulnerable to runs" (Bhattacharya & Thakor, 1993). However, the 2007–2008 crisis surely suggests that external *wholesale* funding (on capital markets and through money market funds) may increase instability (Hardie & Howarth, 2013a; Huang & Ratnovksi, 2011).

On the asset side, contemporary banking theory also expected markets to reduce risk: "both theory and evidence support the expectation that risks should be reduced rather than increased should banks be permitted to engage in securities, insurance and other services" (Benston, 1994). This view has also lost credibility since the 2008 banking crisis. De Jonghe shows that in a study of a sample of European banks: "the shift to non-traditional banking activities increases banks' tail betas and thus reduces banking system stability because interest income is less risky than all other revenue streams" (2010, p. 26).

There is also evidence that increased reliance on fee-based income leads to higher revenue volatility – so that income diversification actually increases, rather than decreases risk (DeYoung & Roland, 2001; Stiroh, 2004; De Jonghe, 2010). DeYoung and Roland, in particular, find that for US commercial banks, an

increase in product mix (i.e. banks shifting to non-interest bearing activities) has led to higher revenue volatility, only partly compensated for by a higher level of revenues (as risk premium), and compounded by the potentially large losses incurred as a consequence of excessive risk-taking. Recent empirical evidence for European small banks shows similar results, i.e. that income diversification increases risk (Mercieca, Schaeck, & Wolfe, 2007). Moreover, De Jonghe (2010) finds that among European banks listed on stock markets, income diversification increases systemic bank risk; downturns in bank stock appear linked to downturns in bank indexes. Stiroh (2004) finds that diversification to non-interest income is related to lower profits and higher risks in US banking. 42

So it can be argued that one of the reasons for greater stability and better overall performance of alternative banks is their *lower* revenue diversification, which is the direct outcome of their different models of governance and business and, perhaps, their smaller average size (except for development banks). This also explains why many alternative banks resisted the "originate-to-distribute" model (now associated with serious pitfalls) and retained instead traditional "originate-to-hold" models. Profit-maximizing private banks that originate loans to sell them on secondary markets tend to confront serious problems of adverse selection and moral hazard (Berndt & Gupta, 2009; Wray, 2013; Boyer, 2013). Berndt and Gupta find that banks actively engaged in loan selling on secondary markets underperform their peers by 9% a year as measured by risk-adjusted abnormal returns, concluding that the originate-to-distribute model might not be socially desirable. This is hard to reconcile with Duffee's claim that "in equilibrium, banks with private information cannot systematically take advantage of outside investors" (2009). Stakeholder-governed banks, which have a higher propensity to retain the originate-to-hold model, have also been found to sustain more stable earnings (Coco & Ferri, 2010).

11 Alternative banks help smooth inter-temporal risk

Allen and Gale (1997) argue that a key advantage of banks over capital markets is their ability to smooth inter-temporal risk. Banks are able to accumulate capital in good times and use it in bad times. As Ayadi et al. point out, "Creating and unlocking reserves is a specific technique of risk management"

⁴² By contrast, Chiorazzo, Milani, and Salvini (2008) find a positive relationship between increased reliance on non-interest income and risk-adjusted returns for small Italian banks.

(2010, p. 108). This extends the liquidity creation thesis (Diamond & Rajan, 2000), according to which access to refinancing at low cost and the ability of banks to enforce repayment or liquidate bad loans are key determinants of the liquidity creation function of banks. This is the theoretical basis for our claim that greater client confidence and trust in alternative banks provide a competitive advantage over private banks. While clients tend to withdraw deposits from private banks during crises, deposits often *increase* at alternative banks during difficult times. This reinforces the capacity of alternative banks to provide counter-cyclical lending. Alternative banks are therefore better able to perform this critical function of inter-temporal risk smoothing (Ayadi et al., 2010).

This ability can be explained by several factors. First, as mentioned, alternative banks retain greater trust and confidence from depositors because of their history, more stable governance, distinctive social mandates, and economic organization (prudent management, non-profit capital structure, and use). Second-tier organizations also strengthen trust, for instance, through cross-guarantee schemes (Coco & Ferri, 2010), although most of these agreements were dropped by 2005 under pressure from European Community competition rulings. Nonetheless, alternative banks still appear able to accumulate capital more quickly because they are not expected to distribute dividends to members – especially in hard times. In a related argument, Berlin and Mester (1998) show that rate-insensitive core deposits allow for inter-temporal smoothing in lending rates.

Secondly, alternative bank equity is different from joint-stock bank equity, in that it does not belong to the "current cohort of members" (Ayadi et al., 2010). Indeed it can be viewed as an "owner-less intergenerational endowment that is available for use by current members, under the implicit or explicit understanding that they will grow it further and pass it on to the next generation of members" (Fonteyne, 2007, p. 4). In addition, alternative banks are under less pressure to mark these endowments on the market – precisely the kind of pressure that capital markets put on joint-stock banks (Allen & Gale, 1997), in line with the free cash flow problem evoked earlier. Indeed, as pointed out in Ayadi et al. (2009), joint-stock banks have incentives to disclose and distribute their reserves in good times since it is financially profitable for the firm even though it is not socially desirable; by contrast, public banks, savings banks, or cooperative banks lack incentive to distribute reserves during upswings in capital markets.

Thirdly, inter-temporal risk smoothing is also linked to relationship banking. As Boot (2000) notes, the durability of bank-borrower relationships positively affects credit supply, especially for new firms or borrowers without credit history. Indeed, losses incurred by banks at the outset of banking relationships, which constitute a form of credit subsidy (Petersen & Rajan, 1994), are recouped over time as relationships unfold through better soft information and trust.

12 Conclusions

This article explains an anomaly for contemporary banking theory and neoliberal policy designs: the unexpected realization of competitive advantages by alternative banks. Often seen as anachronisms amidst pro-market reforms since the 1980s, alternative banking groups have nonetheless performed well since liberalization, deregulation, privatizations, demutualization, adoption of new technologies, and the 2007-2008 global financial crisis. Despite biases toward private ownership, market efficiency, and money center banking, concepts and theories from banking theory nonetheless help explain, at least in part, the performance of cooperative banks, regional and local government savings banks, and state-owned special purpose or development banks. However, a broader and less biased view provided by heterodox theories of the firm and institutional foundations of competitive advantage is required to more adequately explain how business models of alternative banks based on sustainable returns, stakeholder governance, and social and public policy missions produced performance equal to or better than private banks.

This implies that banking studies need to go beyond standard approaches in financial economics that define banks as profit-maximizing firms acting as financial intermediaries between client-investors and capital markets. Although they may indicate several sources of competitive advantage unique to alternative banks, neo-institutional economic theories of the firm such as property rights theory and agency theory (and empirical research deeply biased against non-profit firms) fail to capture how alternative banks work. We therefore expand the scope of inquiry and develop a more comprehensive framework to explore multiple facets of alternative banks as social and economic entities.⁴³

Drawing on various strands of banking theory, past work on non-profit firms, and recent heterodox theories of the institutional foundations of competitive advantage, we provide a more complete explanation for the emergence, evolution, and persistence of alternative banks. This framework suggests that (a) all banks serve a much broader range of stakeholders than shareholders alone; (b) accordingly, banks, regardless of their core mission (profit maximization or non-profit) and governance structure (shareholder- or stakeholderoriented), serve a much broader set of purposes than supposed in banking theory and empirical studies in the comparative political economy of banking; (c) key features of modern banking (such as relationship lending) require links

⁴³ As Biondi argues, "the interaction of the parts is not sufficient to understand the durable existence and functioning of the firm-entity" (2007, p. 257).

and networks in economic, social, and political settings; (d) bank involvement in inter-temporal dynamics (especially smoothing inter-temporal risk) places the durability and stability of their operations at the heart of their business.

These four characteristics of banking help us explaining the apparent anomaly of successful alternative banking groups; they also suggest the need for new approaches in banking theory. In terms similar to the re-discovery and re-interpretation of heterodox traditions in theories of the firm that improved understanding the firm as an entity (Biondi et al., 2007), we conclude that institutional theories of banking are needed to explain bank behavior and performance as embedded in the social, political, cultural, and economic realities that determine competitive advantage in the many markets and spheres in which banks allocate resources.

Theories of banks as institutions differ fundamentally from theories of banks as shareholder-oriented firms. Contemporary banking theory defines banks as profit-maximizing, shareholder-owned firms that manufacture assets on capital markets. From this perspective, banks are financial intermediaries run by executives in the interest of shareholders; market-based banking allows banks to reduce capital reserves and leverage positions through Value at Risk (VaR) or other quantitative strategies that rely on efficient capital markets to manage risk and manufacture assets to maximize profits.

In contrast, an institutional theory of banking defines banks as deposittaking and loan-making institutions that are run by corporate boards with stakeholder representation toward the realization of social, economic, and public policy missions. This requires balancing assets and liabilities and the use of relationship banking and soft information acquired over time to ensure that

Table 11: Theories	of banks as	shareholder-oriented	firms vs theories	of banks as institutions

	Banks as	
	Shareholder-oriented firms	Social and economic institutions
Governance	Shareholder	Stakeholder
Mission	Profit maximization	Sustainable returns for institutional missions
Business model	Manufacture assets and increase liabilities	Balance assets and liabilities
Strategy	Maximize leverage	Moderate leverage
Risk management	VaR or marked-based risk management	Relationship banking and soft information
Theoretical underpinning	Capital market efficiency	Uncertainty and social institutions

investments amidst uncertainty succeed, produce sustainable returns, and contribute to social and public policy goals.

An institutional approach to banking requires different measures of bank performance. Standard measures used to compare the performance of private banks and alternative banks suffer from biases toward the former and implicitly or explicitly imply that banks exist as a result of market failure. Banks, as institutions, do more than simply intermediate between citizenconsumers and capital markets to generate market value for shareholders. It follows that it makes more sense to gauge bank performance on bases other than simple metrics of cost-efficiency, profitability, asset liquidity, and capital reserves held as market positions. In fact, these measures are also biased because they ignore the (often equally large) share of private bank assets that are generated and held off-balance-sheets with dubious market values, such as synthetic derivatives, repos, and other shadow banking activities.

Theories of banks as shareholder-oriented firms and theories of banks as institutions share many concerns that provide rich research agendas. Themes such as credit rationing, capital drain, bank diversity, systemic stability, bank performance in phases of the business cycle, resilience, and inter-temporal maturity transformation provide promising areas to use heterodox theories of the firm and institutional foundations of competitive advantage to develop institutional banking theory. The high cost of crisis suggests new ideas are urgently needed to counter the biases of banking studies toward private, market-based banking, the narrow focus of mainstream theories of the firm, and the received faith in capital market efficiency as grounds for market-based reforms and business models that see banks as intermediaries in efficient capital markets. Allen and Gale (2000) worried that liberalization of the banking industry risked destroying traditional social and state banking groups that had grown organically over long periods of time. A considerable number of alternative banks have indeed succumbed to privatizations and demutualization, or abandoned traditions in favor of business models taken from private banks. However, substantial evidence has emerged from recent research that many alternative banking groups have maintained their distinctive institutional makeup to realize competitive advantages over private banks. This provides a more prospective agenda than Allen and Gale feared 14 years ago: alternative banks provide a unique opportunity to develop alternative, institutional theories of banking.

Appendices

Table 12: German bank balance sheet total assets, billion euros at historical values, 1950-2010

Regional Foreign Regional 2.513 4.103 0.746 13.744 28.703 3.628 44.559 6.159 95.922 16.042 127.593 22.763 265.340 51.510 409.801 39.007 552.589 110.790 613.223 121.407 953.920 227.8383	Private banks Savings banks	Coop banks	Govern	ment banks	Government banks Special purpose federal	Lander
3.904 2.513 4.103 0.746 14.650 13.744 28.703 3.628 42.726 44.559 6.159 95.922 16.042 115.207 127.593 22.763 265.340 51.510 239.568 409.801 39.007 552.589 110.790 969.783 613.223 121.407 953.920 227.383	Regi	onal National	Mortgage BandL Assoc	andL Assoc		
14,650 13.744 28.703 3.628 42,726 44,559 6.159 95.922 16.042 115,207 127.593 22.763 265.340 51.510 239,568 409.801 39.007 552.589 110.790 969,783 613,223 121,407 953.920 227.383		ŀ	1.163		2.281	2.307
42.726 44.559 6.159 95.922 16.042 115.207 127.593 22.763 265.340 51.510 239.568 409.801 39.007 552.589 110.790 969.783 613.223 121.407 953.920 227.383			22.060		13.323	17.446
115.207 127.593 22.763 265.340 51.510 239.568 409.801 39.007 552.589 110.790 969.783 613.223 121.407 953.920 227.383			56.975		35.257	65.055
239.568 409.801 39.007 552.589 110.790 969.783 613.223 121.407 953.920 227.383			163.056		76.420	195.575
969.783 613.223 121.407 953.920 227.383		٠.	312.510		255.426	389.486
003 171 050 100 1 557 501 500 355 700 500 5	2		891.816	153.632	460.829	1,222.704
2,082.898 733.097 203.873 1,082.870 282.300	1,082.870 262	62.500 705.044	719.525	198.908	898.227	1,463.536

Source: Deutsche Bundesbank, available on www.bundesbank.de/Navigation/EN/Statistics/statistics.html?nsc=true. Accessed on 10 February 2014.

Table 13: Deposits by type of bank, Germany 1950-2010, billion euros at historical values

Big 1950 1.280 1960 2.776 1970 8.785	Regional 0.823	Foreign			Coop Dames		Government Danks	Special pulpose	רמוכנו
	0.823	,		Regional	National	Mortgage	BandL Assoc	federal	
		1	0.541	0.609	0.346	0.18		0.637	1.000
	3.352	ı	2.069	2.711	0,691	1.448		2.024	7.153
	14.812	5.026	7.643	12.686	3.253	5.678		9.126	24.310
	42.218	18.941	29.307	39.68	17.639	26.549		27.276	59.245
	187.833	32.854	76.114	88.660	34.958	35.129		87.725	142.183
	188.773	83.132	234.344	129.214	80.978	105.536	28.454	116.042	439.058
	150.252	133.361	188.377	130.190	99.632	225.684	30.293	158.409	406.481

Source: Deutsche Bundesbank, available on www.bundesbank.de/Navigation/EN/Statistics/statistics.html?nsc=true.Accessed on 10 February 2014.

Year	Pri	vate banks	Savings	(Coop banks	Go	vt banks
	Big	Regional	banks	National	Regional	Sp. purpose	Lander
1970	2.67	2.04	2.75	0.84	3.52	0.99	0.69
1980	2.11	1.65	2.93	0.73	3.29	0.68	0.58
1990	2.32	1.81	2.67	0.66	2.95	0.7	0.61
2000	0.94	1.72	2.33	0.78	2.45	0.45	0.56
2010	0.95	1.69	2.20	0.48	2.33	0.44	0.68

Table 14: Interest spread by type of German Bank, 1970-2010, in %

Source: Deutsche Bundesbank, available on www.bundesbank.de/Navigation/EN/Statistics/statistics.html?nsc=true. Accessed on 10 February 2014.

Table 15: Interest income as % balance sheet by type of German Bank, 1968-2011

Year	Priv	vate banks	Savings banks	c	oop banks	Governme purp	nt special ose banks
	Big	Regional		National	Regional	Federal	Lander
1970	7.2	7.82	7.17	6.5	7.88	5.08	6.38
1980	8.55	8.5	7.65	7.82	8.24	6.53	7.25
1990	7.75	7.68	7.23	7.92	7.56	6.46	7.33
2000	5.24	5.58	5.72	5.04	5.69	5.81	5.63
2010	2.19	3.74	4.02	2.27	4.03	4.47	3.21

Source: Deutsche Bundesbank, available on www.bundesbank.de/Navigation/EN/Statistics/statistics.html?nsc=true. Accessed on 10 February 2014.

earnings stability

growth, market power

Table 16: A synthesis of empirical analyses of alternative bank performance

Study	Main focus	Countries covered	Period of Units of observation	Units of observation	Method	Independent variables	Dependent variables	Main findings	Data sources
Ayadi et al. (2010)	Cooperative and commercial banks	7 European countries	2000–2008 Sample of banks (tota no. of 29,9 observation	Sample of banks (total no. of 29,978 observations)	Pooled OLS regression and a fixed effect Panel regression	Bank type	Measures of efficiency, profitability and risk: RoA, RoE, cost-income ratio, earnings stability, regional growth, market power	Cooperative banks Bankscope; more profitable and in national many cases more cost- cooperative efficient, and more associations stable	Bankscope; national cooperative associations
Cornett et al. (2010)	State-owned banks and privately owned banks	16 East Asian countries	1989–2004 Sample of 456 banks which 142 governmen owned)	Sample of the 456 banks (of powhich 142 government to owned)	r-Test; pooled cross- sectional and time-series regressions with error terms Clustered at the firm level	Bank ownership	Several performance measures: ROA and a modified ROA (pre-tax cash flows/book- value total assets), capital ratios, NPLs	Compared to state- owned banks, privately owned banks are more profitable and better capitalized, have lower percentages of non- performing loans	Bankscope; additional sources for ownership data
Ayadi et al. (2009)	Savings and 5 European commercial countries banks	5 European countries	1996–2006	Sample of banks (19,139 observations)	Stochastic frontier based on a translog cost function	Bank type	Measures of efficiency, profitability and risk: RoA, RoE, cost-income ratio, earnings stability, regional	Measures of No significant efficiency, differences between profitability and savings and risk: RoA, RoE, commercial banks in cost-income terms of efficiency and ratio, earnings profitability. Slight stability, regional advantages in terms of	Bankscope; national savings banks associations

		đu	
Deutsche Bundesbank	Bankscope	Savings banks association, Spanish Securities and Exchange Commission and the Private Banking Association	Bankscope
Savings banks more stable than commercial banks	Cooperative banks show lower profit volatility than commercial banks	Earnings stability Spanish savings banks Savings banks (2-score) and less risky than solvency ratio commercial banks Spanish Securities and Exchange Commission and the Privatte Banking Association	Earnings stability Cooperative banks are (z-score) more stable than commercial ones
z-score, likelihood distress, non- performing loan ratio	Profit volatility (standard deviation of RoA)	Earnings stability (z-score) and solvency ratio	Earnings stability (z-score)
Bank type	Bank type; governance (board stability) and income diversification	Bank type	Bank type
Regressions; panel logit model	OLS regressions	Dynamic panel data	Regression; panel model
Sample of 3,810 banks	Sample of 211 OLS banks regr	Sample of 127 banks (total no. of 1,030 observations)	Sample of banks (16,577 observations)
1995–2007	1995–1998	1993-2000	1994–2004 Sample of banks (16,5 observation
Germany	Italy	Spain	29 OECD countries
Savings and commercial banks	Cooperative and commercial banks	Savings and commercial banks	Cooperative and commercial banks
Beck et al. (2009)	Bongini and Ferri (2008)	Garcia- Marco and Robles- Fernandez (2008)	Cihak and Hesse (2007)

association

mechanisms

Table 16: (Continued)

Study	Main focus Countries covered	Countries covered	Period of Units of observation	Units of observation	Method	Independent Dependent variables variables	Dependent variables	Main findings	Data sources
al. (2007)	Mutual and 15 Europe government- countries owned and commercial banks	15 European countries	1999-2004	1999–2004 Sample of 181 OLS large banks regr	regression	Bank ownership	Cost-efficiency, profitability, earnings stability (asset quality and z-score)	Cost-efficiency, Cooperative and profitability, government-owned earnings stability banks slightly more (asset quality cost-efficient, less and z-score) profitable than commercial banks; mutual banks less risky, government-owned banks riskier	Bankscope
Carbó Valverde, Kane, and Rodriguez (2008)	Savings banks		1992–2001	Sample of 77 commercial and savings banks					
Chakravrty and Williams (2006)	Chakravrty Savings and Germany and commercial Williams banks (2006)	Germany	1999	1999 516 banks	Stochastic frontier	Bank ownership	Operating profit efficiency	Commercial banks less Bankscope profit efficient than non-profit banks	Bankscope
Crespi et al. (2004)	Savings banks	Spain	1986–2000 Sample of banks (tota no. of observation	Sample of banks (total no. of observations:	Multivariate regression	Bank ownership and governance	RoA	Savings banks more profitable than commercial banks	Savings Banks association and private banks

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Altunbas et al. (2003)	Savings, cooperative, and commercial banks	15 European countries + the US	1990–2000	Sample of banks (total no. of 25,841 observations)	Stochastic frontier and translog function	Bank ownership	Cost and profit efficiency	Commercial banks less Bankscope cost-efficient but more profit efficient than savings and cooperatives	Bankscope
Carbó Valverde, Gardener, and Williams	Savings banks	12 European countries	1989–1996	Sample of banks (total no. of observations: 4,083	Stochastic cost frontier	Bank size and country	Bank size and Cost-efficiencies country	Smaller savings banks are more efficient than large ones	Bankscope
Salas and Saurina (2002)	Savings and commercial banks	Spain	1983–1997	1,381 bank observations	Regression; panel data analysis	Bank type	Risk (measured as the ratio of problem loans)	No significant difference between commercial and savings banks	Central bank
La Porta et al. (2002)	Government- owned banks	92 countries	1960–1995	Country	OLS regressions	Country-wide degree of government ownership of banks	Financial development and economic growth	Government ownership Various: of banks slows down Banker's financial development Almanac and growth Thomsor Directory World B:	Various: Banker's Almanach, Thomson Bank Directory,
Altunbas et al. (2001)	Cooperative and savings banks	Germany	1989–1996	7,539 bank- level observations	Stochastic frontier	Bank ownership	Cost-efficiency	Slight cost and profit advantages for non- profit banks	Bankscope
Valneck (1999)	Building societies and commercial banks	United Kingdom	1983–1993	Sample of 17 building societies and 7 banks	Parametric models	Bank ownership type	RoA, adjusted RoA, other earnings measures	Mutual building societies outperform joint-stock retail banks	Bankscope

Table 16: (Continued)

Study	Main focus	Countries covered	Period of Units of observation	Units of observation	Method	Independent Dependent variables variables	Dependent variables	Main findings	Data sources
Cole and Mehran (1998)	Thrift institutions	United States	1983–1995	1983–1995 Sample of 94 institutions		Ownership change	Stock performance (annual stock returns)	Demutualized thrifts perform better than thrifts	
Esty (1997)	Esty (1997) Savings and loans and commercial banks	United States	1982–1988	1982–1988 Sample of 2,515 SandLs	Parametric and non- parametric methods	Bank type	Risk-taking	Stock thrifts show greater risk-taking than mutual thrifts	Federal agency's annual reports
Cebenoyan Saving et al. (1993) loans	Cebenoyan Savings and et al. (1993) loans	Atlanta, United 1988 States	1988	Sample of 559 Stochastic SandLs cost frontier	Stochastic cost frontier	Bank type			
Mester (1993)	Savings and loans	United States	1991	Sample of Stochast 10,571 SandLs frontier; parametr cost func	Stochastic frontier; parametric cost function	Bank ownership	Cost-efficiency	Joint-stock SandLs are more efficient than mutual SandLs	

Source: Butzbach and Mettenheim (2014, pp. 36-40).

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