

‘Back to the Future of Alternative Banks and Patient Capital’

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‘Alternative? You make me sound like a heroin addict! They [private banks on capital markets] are the punks gone wrong!’
German regional cooperative bank CEO, 2012.

Abstract

This paper explores how savings banks, cooperative banks, and development banks were founded as social reactions of self-defense in the 19th century, accumulated patient capital but suffered political capture in the early 20th century, and have unexpectedly realized competitive advantages as liberalization and new technologies changed their industries in the late 20th and early 21st century. Theories of banking and institutional foundations of competitive advantage help explain this anomaly for contemporary approaches that define banks as profit-maximizing financial firms. Evidence from history, balance sheets, and 36 difference of means tests of 7,581 commercial banks 1,693 cooperative banks and 70 government banks from 2006-12 confirm recent evidence that alternative banks make better banks. Although reforms have marginalized alternative banks in liberal market economies, liberalization produced back to the future modernization of patient capital practices at alternative banks in coordinated market economies.

Introduction

Theories of banking and institutional change, balance sheet evidence, and comparison of bank performance explain how patient capital helped alternative banks grow from social reactions of self-defense¹ in the 19th century to remain two of three pillars² of banking in coordinated market economies in the 21st century. Concepts and theories from banking studies and social economy clarify how patient capital at alternative banks has sustained better business models than profit-maximizing financial firms, despite the latter remaining paradigmatic in financial economics and contemporary banking theory. Patient capital at alternative banks is related to five institutional foundations of competitive advantage in banking: Lower cost of capital; lower agency costs; relationship banking; economies of scale; longer time horizons; and inter-temporal risk smoothing. Alternative banks thereby produce more sustainable returns to cover deposit flows, credit risk, returns on savings, and long term investments toward social missions or public policy.

Although bank change since liberalization will require further study, a compelling anomaly has arisen. Liberalization in coordinated market economies has not produced convergence toward private banking but, instead, different trajectories shaped by various hybrid reform strategies, private banks, and the focus of this article: a ‘back to the future’ return to patient capital traditions at alternative banks with stakeholder governance and social or public policy missions. This differs from expectations about convergence toward private, market based banking and impatient capital in comparative capitalism, financial economics, and banking studies; expectations shared by the vast majority of private bankers, the financial press, bank regulators, and international financial institutions (Deeg, 2010).

¹ In the sense of Polanyi (1944), despite his treating labour unions, central banks, and protectionism as social reactions of self-defense rather than alternative banks.

² The expression ‘three pillars’ (cooperative banks, savings banks, private banks) (Schmidt et al 2014) underestimates alternative banking because government special purpose banks (a fourth ‘pillar’) continue to provide around 10 percent of domestic credit and finance in coordinated market economies.

Expectations about convergence are grounded in contemporary banking theory that defines banks as private firms able to tap capital market efficiencies to deliver investment and banking services cheaper and better directly to customers (Berger et al, 2010; Battachayra et al, 2004). If contemporary banking theory is correct, then it follows that patient capital and other traditional banking practices are no longer needed. Critical studies of market based banking (Howarth and Hardie, 2013) also see private, money center banks as having largely replaced traditional banking. Whether positive, in the sense of expecting deregulation to modernize the industry, or critical in the sense of fearing that liberalization may unravel longstanding institutions (Hall and Soskice, 2001; Allen and Gale, 2000), researchers in comparative political and social economy, financial economics, and banking studies concurred, until recently, that the trend was *away* from patient capital (Schmidt et al, 2002).

The decline of long-term holding of equity and long-term loans (Jackson and Vitols 2001; Culpepper 2005) may continue; but evidence about patient capital at alternative banks suggests, at minimum, important exceptions. Studies of financialization also report increased short term profit imperatives in banks and firms (Van der Zwan 2014; Jones and Nisbet, 2011; Erturk et al, 2008). However, these studies underestimate the importance of alternative banks as patient capital providers (Carnevali, 2005). New regulatory frameworks have also been proposed to ensure long-term lending (Bank of England, 2014; G30, 2013; Kay, 2012), while new industry associations such as the Long Term Investors Club pursue similar goals.

Alternative banks are not the only managers of patient capital. Aglietta (2009) focuses on three (non-bank) financial institutions that manage long term, patient capital, albeit not exclusively. In 2009, liabilities in official perennial funds and reserves for public pensions totaled \$2.8 trillion, while private pension funds (\$21.6 trillion) and insurance companies (\$18.6 trillion) totaled \$34.2 trillion. On the asset side, these institutions held \$30.2 trillion without liability commitment (patient capital): \$8.6 trillion in defined contribution pension funds (patient capital), \$19.3 trillion in mutual fund holdings (mixed) and \$2.3 trillion in hedge funds and private equity (impatient capital). In 2014, the International Investment Funds Association reported \$30.8 trillion in total mutual fund assets. Institutional investors in advanced economies, and especially the US, remain the largest. In 2007, US institutional investors held \$24.2 trillion; *five-times* the value of assets held by UK institutional investors (\$3.4 trillion); over ten-fold levels in Germany (\$2.2 trillion) and France (\$2.5 trillion), and half the OECD total (\$40.3 trillion). Pension funds predominate in liberal market economies, while insurance companies predominate in coordinated market economies; both have come under pressure to adopt impatient capital practices (Bank of England, 2014).

This article focuses not on institutional investors but on large alternative banking groups in coordinated market economies that remain two of three pillars of banking. Alternative bank industry associations in Europe reported a total of \$13.1 trillion assets held by member banks in 2013-4. Savings banks in the Euro area held \$5.6 trillion of assets in 2014.³ Cooperative banks held \$3.1 trillion in assets in 2013. Special purpose banks in the Euro area held a further \$4.4 trillion in assets in 2014.⁴

Evidence suggests that patient capital helps make alternative banks better banks. This runs counter to private bank models that remain dominant in research and bank regulation. Ideas from epistemic communities of social and public banking in the past, and historical and balance sheet evidence, clarify how patient capital works at alternative banks. Institutional foundations of competitive advantage made (and

³ European Association of Savings Banks, 'Facts and Figures, 2014.'

⁴ European Association of Public Banks, 'Annual Report 2012-2013.'

continue to make) it possible for alternative banks to provide long-term investments for strategic sectors, social groups and public policy (Zysman, 1983). On the meso and macro levels, this helps avert capital drain and credit rationing (Bressler et al, 2007; Stiglitz and Weiss, 1985). Patient capital at alternative banks also ameliorates business cycles by helping to avert the formation of asset bubbles during upswings; and by ensuring flows of credit and finance during downturns (Schclarek, 2014). Theory and evidence suggest that patient capital at alternative banks helps sustain higher levels of growth; better fund and coordinate public policy; and sustain access to credit, finance and banking services.

Traditionally, private banks and capital markets retained upmarket clients in prosperous urban areas. Alternative banks accumulated patient capital for bankless groups while expanding from simple savings and loans to offer more complex, wholesale services such as payments, insurance, mortgage securitization, and capital market operations. In the late 18th century, municipal savings banks were founded to provide savings and payment services to communities not served by private banks. Cooperative banks were founded to help farmers without access to credit amidst economic crisis and the 1848 revolutions. Government mortgage banks were created in the late 19th century to finance agriculture, small firms, and local public entities; notably securitizing mortgages to accelerate lending. Development banks financed large scale, long term projects of industry and infrastructure that private banks refused to fund.⁵

In the late 19th century, independent local and regional savings banks and cooperative banks created second-tier financial groups that reduced costs, increased scale, and improved monitoring and control over local banks (Guinnane, 2002). Alternative banks used patient capital strategies to manage balance sheets and match long-term investments with liabilities secured through deposit guarantees and the greater trust of clients and the public in general (Größl et al, 2013). A historical perspective suggests the reverse causal order supposed by theories of financial repression and crowding out: Alternative banks responded to demand for patient capital from groups left *bankless* by private commercial banks. Alternative banks and patient capital are, therefore, Polanyian reactions of social self-defense that helped (and continue to help; in coordinated market economies), reverse market failures, credit rationing, capital drain, financial instability, and financial exclusion.

Alternative banking and patient capital in social economics

This claim remits to contested theories and longstanding debates in social economics. English dictionaries often assert that the word ‘bank’ refers to the benches of medieval money lenders (i.e. impatient capital). However, Bergier (1979) confirms MacLeod, Thornton, and other classical political economists that trace the English word to German derivations of the Italian word ‘*monti*’ (pawn-savings banks) and, therefore, traditions of patient capital. Indeed, savings banks and cooperative banks trace their social missions back to ancient church fund management (Bogaert, 1966). Unfortunately, the two major intellectual traditions of the 19th century, Marxism and Liberalism, both *opposed* the accumulation of patient capital at alternative banks. Engels did consider

⁵ ‘The existing commercial banks were unable to provide industry with long-term finance for two main reasons. First, they were unwilling to bear the inevitable risks associated with the financing of new enterprises. Second, they lacked the specialized skills required to deal with the higher risk long-term investments...’ (Aghion, 1999: 3).

cooperative banks as critical institutions for transition to socialism.⁶ However, the militarization of Marxist movements caused workers that joined cooperative banks, or sought to accumulate savings, to be seen as *traitors* seduced by bourgeois individualism or errors of utopian socialism or elite philanthropy. Liberal economists also saw (and continue to see) patient capital at alternative banks as unnecessary dead weight that should be put to more effective use by more efficient private banks and capital markets.⁷

Contrary to its critics, the causal logic of patient capital at alternative banks provides competitive advantages over private banks and retains complementary relations with many other dimensions of social economy. Table 1 places patient (and impatient) capital in two columns; first of research in social economy generally, then in the fields of finance and management, core ideas, government, society, and public policy.

Table 1) Patient Capital and Social Economy Dichotomies

Social Economy	Impatient Capital	Patient Capital
Max Weber	<i>Verkehrswirtschaft</i>	<i>Planwirtschaft</i>
Ralf Dahrendorf	Market Rationality	Plan Rationality
Ronald Dore	Market-oriented systems	Organization-oriented systems
George Kelly	Rule-governed	State Purpose-governed state
Hall and Soskice	Liberal Market	Coordinated Market
Aglietta	Trade	Investment
Finance & Management		
Financial System	Market-Centered	Bank-Centered
Corporate Governance	Outsider	Insider
Management Style	Arms Length	Face-to-face
Inter-Firm Relations	Independence	Networks / Cross-shareholding
Banking System	One Pillar (private)	Three Pillars (+coops and savings banks)
Accounting Standards	Historical Value	Fair Market Value
Core Ideas		
Normative Bias	Individual Liberty	Collective Good
Core Value	Freedom	Solidarity
Welfare Maximization via	Competition	Cooperation
Predictions	Convergence	Persistent Differences
Information	Transparency	Proprietary
Dominant Cognate	Economic	Political
Government		
State Type	Non-Intervention	Coordination-Regulation
Predominate Branch	Legislature	Executive
Legal Tradition	Common Law	Roman Law
Policy Debates	Neo-Classical Economics	Public Goods
Society		
Social Structure	Mobile	Hierarchical
Elites	Private Sector	Public Sector/Mixed
Labour market	Mobile	Fixed
Labour union strategy	External Bargaining	Internal Participation
Education	Liberal Arts and Sciences	Vocational-Technical

⁶ Hilferding succeeded in placing alternative banks at the center of the 1925 Heidelberger Program of social democracy, but hyperinflation, fascism and war prevailed instead (Hoffrogge, 2011).

⁷ Even a progressive political economist such as Charles Gide believed that private, money center banking should replace traditional patient capital practices at savings banks: 'The function of a savings bank, in fact, is not to serve as an institution for investing money. Its business is to enable people to put money aside and even to build up a little capital. But when this capital has been formed, if the depositors wish to invest it - that is to say, to make a profitable use of it - they have merely to withdraw it: the rôle of the savings bank is ended, and it rests with other institutions such as we have already studied in dealing with banks and credit establishments, to take charge of it.' (Gide, 1906: 510).

Inequality	Higher	Lower
Public Policies		
Pension System	Private-Individual	Public-Universal
Comparative Advantage	Free Markets	Institutional Foundations
Interest Organization	Pluralist	Neo-Corporatist
Employment Protection	Low	High

To explore historical and statistical evidence about complementary relations across these domains, it is important to recognize four different theoretical approaches to patient capital at alternative banks. The first is social economy. For theories of social economy, savings banks and cooperative banks were founded to help citizens and farmers not served by private commercial banks. Development banks were founded as institutions for national or regional public policy. From the perspective of social economy, these banks were not designed to maximize profits but, instead, to reach bankless groups or realize social or public policy missions. Savings banks and cooperative banks should therefore be evaluated by the degree to which they help excluded groups to accumulate savings and obtain credit, finance and other banking services. Similarly, special purpose banks should be evaluated by how they contribute to policy missions.

The second theory about patient capital at alternative banks is that of political capture. Although savings banks and cooperative banks were founded with social missions, once these institutions accumulated capital and large market shares in banking and finance, they attracted the attention of political forces. Savings banks and cooperative banks were used by prime ministers to bypass parliamentary control of budgets and finance colonial acquisitions and war. Totalitarian movements and governments also captured alternative banks during the first half of the 20th century. However, after 1945, cooperative banks, savings banks and special purpose banks helped finance recovery, coordinate policies in Welfare States, and, since liberalization of European banking in the 1990s, remain two of three pillars of banking in coordinated market economies.

The third theory about patient capital at alternative banks is that of banking theory. Fundamentals from banking theory about asset and liability management, corporate governance, balance sheet mismatch, credit risk, liquidity risk, maturity transformation, and further concerns about agency costs, transaction costs, and information problems explain how patient capital helped alternative banks to manage balance sheets better than private banks; both in the past and since liberalization.

The fourth theory about patient capital at alternative banks is that of institutional foundations of competitive advantage. Heterodox theories of the firm broaden the limited and biased definition of banks as profit-maximizing, financial firms to better explain the performance and behavior of alternative banks. Because of greater trust among clients, consumers and depositors, alternative banks are able to manage liability risk and avert runs on deposits better than private banks. Because of their presence in social and political networks and public policy making, alternative banks retain further competitive advantages in relational, retail and wholesale banking. The central offices of special purpose banks provide powerful cost advantages over private banks forced to retain expensive networks of branch offices and large numbers of employees. Savings banks and cooperative banks remain small, independent, local and regional institutions. However, they nonetheless reduce costs, achieve scale and scope, and improve control of risk and management by *sharing* wholesale banking, finance, and insurance groups.

Four theoretical approaches help explain the historical emergence and back to the future modernization of patient capital at alternative banks in coordinated market economies.

Social economics of alternative banking and patient capital

Traditionally, banks were seen as deposit-taking, loan-making institutions whose assets, liabilities, governance, risk management, and performance differed from other types of firms. Since the 1980s, contemporary banking theory has redefined banks as financial firms that intermediate directly between clients, money markets, and investment funds (Berger et al, 2010; Battacharya et al, 2004). Table 2 summarizes seven differences between contemporary banking theory and practices of patient capital at alternative banks. Contemporary banking theory emphasizes shareholder governance, profit maximization, the manufacture of assets on capital markets, strategies of low capital reserves and high leverage, quantitative methods of risk management on efficient markets, and financial intermediation theory to predict convergence toward private, market-based banking. In contrast, patient capital at alternative banks involves stakeholder governance, the production of sustainable returns over time, higher capital reserves and lower leverage to balance assets and liabilities, soft information and relationship banking, and theories of uncertainty and institutional change to predict persistent variety in banking rather than convergence.

Table 2) Banks as financial firms versus banks as institutions for patient capital

	<i>Financial firms</i>	<i>Institutions for patient capital</i>
Theory	Efficient markets	L-Term investment
Capital Theory	Liquid Capital	Patient capital
Governance	Shareholder	Stakeholder
Mission	Profit maximization	Profit sustainability
Business Model	Manufacture assets	Balance asset and liabilities
Strategy	Maximize leverage	Moderate leverage
Risk Management	VaR or risk model	Relationship banking & soft info.
Theory	Financial intermediation	Uncertainty and institutional theory
Method of Study	Econometrics	Historical-institutional
Expected Change	Convergence	Persistent variety

A historical perspective clarifies how alternative banks manage liquidity risk and build trust so essential for banking; how patient capital helps align the incentives of owners/members, managers and staff through corporate cultures that value sustainable returns and social and public policy missions; and how alternative banks developed solutions, gradually over long time spans, to core problems of banking such as managing assets, liabilities, and risks; and reducing transaction costs, agency costs and information problems. Balance sheets provide evidence on the micro level of analysis about the origin, evolution, and back to the future modernization of patient capital at alternative banks since liberalization and new technologies have expanded production frontiers.

A historical-institutional balance-sheet approach

In the late 18th and early 19th century, savings banks grew out of municipal savings agencies and philanthropic initiatives first in Northern Germany, then quickly throughout Europe. Cooperative banks were founded by Reiffeisen and Schultz-Delitz movements amidst economic crisis, hunger, and the 1848 revolutions to share risk and provide credit to farmers not served by private banks and urban savings banks. After the Credit Mobilier mobilized capital in France to accelerate industrialization and infrastructure construction in the 1820s, development banks were founded by national and regional governments across Continental Europe (Aghion, 1999; Cameron, 1953).

Studies of alternative banks suggest five institutional foundations of competitive advantage are related to patient capital: stakeholder governance; two-tier organizational structures; long-term profit sustainability orientations; relationship banking embedded in politics, society and public policy making; greater trust; and lower cost of capital. A historical perspective suggests that patient capital remits to core values and practices of alternative bank management, missions, governance traditions, and corporate cultures.

Alternative banks embody institutional solutions to manage agency risks, transaction costs, liability risk, and other matters at the core of banking theory and institutional socioeconomics. Balance sheets, annual reports, public documents, and secondary studies of these banks suggest the following observations. Retail networks and relational banking in local communities provide savings banks and credit cooperatives powerful competitive advantages. However, independent local and regional savings banks and cooperative banks also created second-tier, joint operations for giro payments and wholesale banking services to reduce costs, increase scale and manage risks (Guinnane, 2002). The social missions of savings banks and cooperative banks sustain socially oriented corporate cultures and long-term profit sustainability orientations that help manage risk and avert losses in capital markets.

Special purpose banks retain different institutional foundations of competitive advantage: lower staff and operational costs. Access to official savings and other sources of capital at low or zero cost also permit special purpose banks to direct credit to strategic economic sectors at below market rates. After the 2007-8 crisis, the advantages of these institutions led the UK and US governments to found special purpose banks for green investments and infrastructure finance, albeit much smaller banks than in coordinated market economies.⁸

Special purpose banks also *multiply money for public policy* to alleviate fiscal constraints. A core idea in post-Keynesian monetary theory is that banks are uniquely able to multiply money. It follows that development banks are uniquely able to multiply funds for public policy. Instead of allocating funds directly for policies, governments may instead hold funds as capital reserves (or official savings funds as long term deposits) in special purpose banks to multiply money for public policy, provide long-term credit and finance below market prices, exercise leadership in bank consortia, and improve contractual control over policy implementation.

During Polanyi's period of liberal market supremacy (1834-73), eight types of financial institutions emerged as social reactions of self-defense to accumulate patient capital and acquire large market shares of domestic banking and finance. Private commercial banks continued to focus on trade, commerce and capital markets. However, savings banks, development banks, emission banks, insurance companies, cooperative banks, payment banks, mortgage banks, and construction banks were founded to reach groups not served by private banks. Table 3 reports these nine types of

⁸ In 2009, cost-income ratios for special purpose banks in Germany (33.0) remained far below private banks (79.9), foreign banks (69.0), savings banks (67.2), and cooperative banks (69.1) (Bundesbank, 2010).

banks and financial institutions in 1900 Continental Europe according to their corporate missions, assets, and liabilities. In addition to private banks, eight further types of financial institutions under national liberalism in 1900 provide a rich legacy of largely lost theories, practices, and epistemic communities of social and public banking.

Table 3) Types of European banks and financial institutions, 1900

Type of Financial Institution	Founding Mission	Assets	Liabilities
Private Banks (1600s)	Trade and Commerce	Securities	Deposits, equity, reserves
Savings Banks (1800s)	Popular savings	Investments	Deposits, equity, reserves
Development Banks (1820s)	Infrastructure	Investments	Official savings, capital, reserves
Cooperative Banks (1840s)	Farm Credit	Investments	Deposits, equity, reserves
Emission Banks (1800s)	Money Management	Reserves	Printed Currency
Insurance Firms (1800s)	Insurance	Investments	Insurance Policies
Payment Banks (1870s)	Payment processing	Payments	Payments
Mortgage Banks (1860s)	Farm, home, public finance	Mortgages	Mortgage Backed Securities
Construction Banks (1880s)	Construction finance	Mortgages	Construction Savings Bonds

Source: Hecht (1900: 51-5)

The following sections review the origin and accumulation of patient capital and competitive advantages by savings banks, cooperative banks, and special purpose banks. The five other types of financial institutions in 1900 (emission banks, insurance firms, payment banks, mortgage banks, construction banks) have largely been incorporated by the four types of banks under consideration (private banks, savings banks, development banks, cooperative banks). Emission banks were transformed into central banks, but many emission bank functions were also retained as second tier operations of regional and local savings banks and cooperative banks. Insurance companies grew independently, but also as joint ventures of savings banks and cooperative banks. Payment banks were also founded as joint ventures of savings banks and cooperative banks. Mortgage banks and construction banks originated as government banks, but also became part of wholesale financial groups of cooperative banks and savings banks, or were privatized to operate on capital markets only to fail after the 2007-8 crisis.⁹

Savings banks

Savings banks were created across Northern Europe and North America in the late 18th and early 19th century (Vogler, 1998; Mura, 1996). Early savings banks were often philanthropic or benevolent associations of protestant or catholic churches. Later, savings banks were created within municipal entities or as corporations backed by public guarantees.¹⁰ District savings banks were created in Prussia, then throughout German states, by pooling local government guarantees. Mutual savings banks in the US and savings trusts in the UK also accumulated patient capital during the latter 19th century and early 20th century to remain half of domestic banking and credit markets, specializing in home mortgages (US Census Bureau, 1949: 266-71). However, the US and UK privatized or demutualized alternative banks after 1970, reducing these institutions from the mainstream to the margins.

⁹ DEPFA is an illustrative case study. A federal German government mortgage bank, it was privatized in 1991, became a global public finance bank during the late 1990s, only to fail in 2007.

¹⁰ In 2005, the last of these guarantees fell under EC competition rulings (Schmidt et al, 2014: 119).

Balance sheet and organizational data clarify the causal logic of patient capital at alternative banks. From 1839-1913, Sparkasse savings banks grew from 85 to 1,765 regional and local institutions with 5,268 branch offices, 14 million savings accounts holding 13 *billion* marks. The evolution of liabilities (Table 3) and assets (Table 4) illustrate the contours of traditional patient capital balance sheet management. Account balances (liabilities) from 1870-1914 reflect the gradual inflow of deposits that covered interest payments and withdrawals. Reserves also were composed of cash or government bonds rather than market positions as in contemporary banking theory and practice.

Table 3) Prussian Sparkasse Savings Banks, 1870-1914

Year	Banks	Number Accounts	Account Balances	Deposits	Interest	Withdrawals	Reserves
1870	932	1,392	467.7	154.4	12.6	138.1	29.0
1875	1,004	2,209	987.8	359.8	28.8	264.4	57.8
1880	1,191	2,942	1,478.5	429.1	43.9	357.0	101.7
1885	1,318	4,209	2,112.8	576.2	59.2	489.6	151.6
1890	1,393	5,592	3,102.4	831.1	80.8	732.8	212.6
1895	1,493	6,876	3,999.6	1,137.9	112.8	904.9	312.4
1900	1,490	8,670	5,493.6	1,402.5	156.8	1,307.2	364.6
1905	1,583	10,643	7,760.2	2,154.4	232.7	1,852.9	543.0
1910	1,711	12,900	10,332.2	3,262.5	331.1	2,819.1	633.1
1914	1,761	14,935	13,109.8	4,467.3	441.3	4,379.7	676.8

Source: Deutsche Bundesbank (1976: 64)

The changing composition of assets at Prussian Sparkasse savings banks also suggests the gradual evolution of patient capital practices as these institutions acquired large scale. From 1870-1914, urban mortgages increase from 25.9-42.6 percent of assets, outpacing rural mortgages that decline from 28.5-16.3 percent of total assets, while securities and business investments increased slightly, and promissory notes declined from 17-3.9 percent of assets.

Table 4) Prussian Sparkasse Savings Bank Assets, 1870-1914

	Urban Mortgages	Rural Mortgages	Securities	Business Investment	Promissory Notes	Balance Sheet Total
1870	25.9%	28.5%	19.3%	9.4%	17.0%	507.5
1875	27.3%	25.7%	23.6%	8.3%	15.1%	1,129.9
1880	28.4%	27.5%	24.3%	7.1%	12.7%	1,640.4
1885	26.6%	27.4%	28.8%	6.7%	10.5%	2,373.8
1890	28.0%	26.2%	31.4%	6.8%	7.6%	3,417.3
1895	28.5%	25.8%	30.3%	8.9%	6.5%	4,557.2
1900	33.5%	24.9%	26.0%	10.3%	5.3%	5,975.0
1905	35.9%	21.0%	25.5%	11.0%	6.6%	8,963.8
1910	39.4%	19.9%	23.6%	13.5%	0.8%	11,588.9
1914	42.6%	16.3%	24.0%	13.2%	3.9%	14,521.2

Source: Deutsche Bundesbank (1976: 64)

Sparkasse savings banks were designed with social missions and retained corporate mandates to contribute to the improvement of lower and middle classes.¹¹

¹¹ Prussian savings bank regulations of 1838: 'It must be remembered that the institution is intended primarily for the needs of the poorer classes, in order to extend to them the opportunity for depositing small savings. Any deviation from this policy must be avoided' (Seider, 1908: 350)

Two concerns about social banking emerged in the early 20th century. First, the influx of large deposits was seen as usurpation of savings banks by upper classes and capitalists in search of safe, often guaranteed deposits. Second, the investments of savings banks often strayed from lending to the lower classes, becoming instead important sources for public finance and (largely small and medium) enterprises.

To test for capture, Seidel counted the average values of deposits at Sparkasse savings banks from 1850-1913 (195.4 - 909.4 marks) to see if increases reflected the gradual accumulation of compound interest or, instead, increases in deposit values that would suggest capture.¹² In fact, 909.4 marks remained just *below* the 925.82 marks that would have accumulated exclusively from annual compound interest of 2.5 percent 1850-1913. If depositors had deposited, on average, 20 marks of additional savings per year 1851-1913, this would have brought the average per-capita balance of savings accounts to 3,916.3 marks; well above the 909.4 marks reported by savings banks in 1913. Sparkasse savings banks appear to have continued to serve workers and farmers rather and averted capture by larger depositors from upper classes and capitalists that would have increased liability risk.

Recent studies of savings banks since liberalization and transition to new regulations such as International Financial Reporting Standards (Biondi, 2011xxx) and Basel Accord capital reserve guidelines (Lall, 2012) suggest that these institutions have realized competitive advantages over private banks (Ayadi et al, 2010; Schmidt et al, 2014). However, before turning to recent change, a historical perspective is in order.

Cooperative banks

Credit cooperatives were founded by Raiffaissen and Schulze-Delitz social movements to support rural workers and farmers in the wake of crop failures and potato blight in 1846-7 and the economic crisis and political revolutions that followed (Faust, 1977). The increase in number of credit cooperatives in Germany (133-1,245), members (31,603-746,058) and accumulation of assets (66 million-1.7 trillion marks) and credit (61 million-1.2 trillion marks) from 1839-1915 suggest the importance of cooperative banks as social reactions of self-defense during Polanyi's 19th century. Cooperative banks suffered capture under fascism in the 20th century, but returned to their social missions after 1945 to retain large market shares in many coordinated market economies; even since liberalization, monetary unification, and financial crises in the 21st century (Groeneveld, 2014).

Table 4) Evolution of Cooperative Banks, 1860-1915

Year	Banks	Members	Assets	Credit	Savings Deposits	Inter-Bank Deposits	Member Balance	Reserves
1860	133	31,603			7.0		1.0	0.2
1865	498	169,595	66.0	61.0	53.0		13.0	1.0
1870	740	314,656	187.0	166.0	131.0	7.0	40.0	4.0
1875	815	418,251	432.0	390.0	317.0	13.0	84.0	8.0
1880	905	460,656	493.0	438.0	353.0	11.0	102.0	16.0
1885	896	458,080	544.0	467.0	390.0	12.0	108.0	22.0
1890	1,072	518,003	620.0	538.0	438.0	16.0	117.0	28.0
1895	1,068	525,748	666.0	569.0	454.0	13.0	126.0	38.0
1900	870	511,061	806.0	672.0	586.0	24.0	133.0	45.0
1905	921	539,993	1,109.0	899.0	836.0	23.0	166.0	66.0

¹² Seider's calculations are part of the US National Monetary Commission report available online from the St. Louis Federal Reserve Bank.

1910	939	600,387	1,477.0	1,202.0	1,084.0	31.0	216.0	94.0
1915	941	601,395	1,754.0	1,212.0	1,319.0	23.0	231.0	121.0

Source: Deutsche Bundesbank (1976: 344-5)

The evolution of cooperative bank balance sheets from 1860-1915 suggest the gradual expansion from simple credit to other bank operations (see Table 4). Credit declines from 90-55 percent of total assets 1865-1915. Moreover, while member balances decline from 19-13 percent of total assets, reserves increase from 2-6 percent of total assets.

The gradual growth of local credit cooperatives during the 19th century with traditional deposit-taking, loan-making balance sheets provided the basis, in the 1890s, for creation of shared giro and wholesale operations; an institutional innovation that remains a profound competitive advantage for cooperative banks. Unlike private banks forced to maintain both retail and wholesale networks, local and regional credit cooperatives in Germany shared the cost and reaped the benefits of payments services and other wholesale products and services with stakeholder governance and corporate cultures based on core values of cooperative and credit union movements.

Table 5) Cooperative ‘Central’ Banks, 1895-1913, million marks

		Balance	Metal	Foreign			Inter-		Capital+	Other
	N	Sheet	Reserves	Exchange	Securities	Credit	Bank	Accept's	Reserves	Liabilities
Prussia										
1895	1	15.0	0.0	1.0	5.0	6.0	5.0		5.0	0.0
1900	1	101.0	1.0	36.0	18.0	44.0	43.0		51.0	2.0
1907	1	163.0	1.0	55.0	50.0	56.0	43.0		57.0	1.0
1913	1	212.0	3.0	53.0	47.0	106.0	74.0		85.0	4.0
Other										
1895	17	42.0	0.0	1.0	10.0	39.0		0	3.0	0.0
1900	29	130.0	1.0	3.0	13.0	101.0		12.0	10.0	7.0
1907	58	264.0	2.0	14.0	30.0	211.0		11.0	23.0	3.0
1913	46	472.0	5.0	34.0	37.0	380.0		6.0	53.0	17.0

Source: Bundesbank, 1976: 348

A single Prussian central cooperative bank facilitated payments, foreign currency exchange, sale and management of bonds and securities, and inter-bank credit for credit cooperatives, reaching over a billion marks on balance sheets by 1920. Forty six other central banking operations were created by networks of local credit cooperatives; summing to 472 million marks on balance sheets by 1920 (Guinnane, 2001). Table 5 reports the composition of the single Prussian and other regional central banks (17-46 1895-1913) shared by local cooperative banks. Credit cooperatives thereby evolved from bottom up Raiffeisen and Schultz-Delitz movements to two tier institutions combining wholesale banking and financial operations that provided local and regional cooperative banks with a wide variety of products, services, and procedures for monitoring and control of member banks.

Historical evidence indicates how alternative banking business models accumulated patient capital and acquired institutional foundations of competitive advantage. Balance sheets at cooperative banks and savings banks from 1870-1914 suggest simple, stable, and viable bank business models that valued solid deposit bases (to reduce liquidity risk and funding costs) and *shared* wholesale operations to reduce costs for independent local and regional banks. Shared second tier operations provide scale and reduce costs while enabling local relational banking and other institutional foundations of competitive advantage in social and political networks.

From development banks to special purpose banks

Development banks financed infrastructure and industrialization across Continental Europe during the 19th century and continued to evolve after 1945 as special purpose banks with public policy missions (Aghion, 1999). A historical perspective indicates precisely the reverse causal direction asserted by theories of financial repression. It is because private banks resisted long-term investments in infrastructure that Continental European governments founded development banks. After World War I, development banks provided cash, subsidized loans and guarantee of private bank bonds for reconstruction. After World War II, the Kreditanstalt für Wiederaufbau (Reconstruction Credit Agency, KfW) and Japan Development Bank were created to channel Allied funds for reconstruction. However, far from disappearing under pressure from liberalization and private banks, old ideas about heavy industry have been replaced in the 21st century by new theories of environmental sustainability, community development, and human capacities.

Despite their large size and importance in coordinated market economies, special purpose banks have nonetheless failed to attract in depth case studies and independent academic research. Special purpose banks appear to continue to provide both counter cyclical credit and finance to reverse downturns and agile policy making capacities to supply credit and finance to strategic sectors (Zysman, 1983). Indeed, the advantages of special purpose banks have led liberal market economies such as the UK and US to create new (smaller) special purpose banks,¹³ suggesting that long-term directed credit and finance may shape public policy and banking outside coordinated market economies.

Patient Capital and Alternative Bank Performance

Recent statistical evidence suggests that alternative banks perform better than private banks according to standard measures of banking and economic growth (Andrianova, 2012; Ayadi et al, 2010; 2009). This section reports difference of means tests for 9,344 banks in Europe and North America based on thirty six indicators of bank performance in Bankscope balance sheet data. Despite biases toward private banks in several measures, cooperative banks and government banks nonetheless perform as well or better than private commercial banks in 35 of 36 measures of bank operations, capital quality, asset quality, and liquidity.¹⁴

In terms of operations, alternative banks retain: 1) lower, more competitive cost-income ratios; 2) retain more cash from returns because of lower requirements to pay dividends; 3) produce more net interest revenue on equity; 4) lower net interest margins that suggest advantages in competitive markets. Alternative banks reported lower non-interest related expenses than private commercial banks, similar pre-tax income levels, and similar returns on assets compared to private commercial banks (See Table 6).

Table 6) Operations Performance of Coop, Commercial and State Banks, 2006-12

	Cost to Income Ratio	2006	2007	2008	2009	2010	2011	2012	Mean
EU15	Cooperative	65.6	69.5	71.0	69.2	69.5	68.4	68.0	68.7
	Commercial	63.7	64.1	70.0	70.5	71.5	80.0	74.1	70.6
	State	49.0	50.8	63.6	52.8	59.0	55.8	60.9	56.0

¹³ UK Green Investment Bank and US Infrastructure Investment Bank.

¹⁴ Bankscope data combines local and regional government savings banks with special purpose banks.

N. America	Commercial	63.2	66.9	75.2	73.4	69.4	66.4	65.5	68.5
Dividend Payout									
EU15	Cooperative	28.9	29.6	33.9	26.5	23.1	23.1	22.0	26.7
	Commercial	55.2	53.1	61.7	53.4	52.4	51.7	61.1	55.5
	State	39.9	40.5	40.2	31.5	38.8	25.4	51.9	38.3
N.America	Commercial	47.8	58.5	40.9	24.8	30.9	37.1	47.8	41.1
Net Interest Margin									
EU15	Cooperative	2.8	2.8	2.7	2.6	2.6	2.6	2.5	2.6
	Commercial	2.5	2.6	2.5	2.2	2.2	2.2	3.2	2.5
	State	1.8	1.8	1.7	1.5	1.4	1.5	1.5	1.6
N. America	Commercial	3.8	3.8	3.6	3.6	3.9	3.8	3.7	3.7
Non Interest Expenses / Avg Assets									
EU15	Cooperative	3.2	3.0	2.9	2.8	2.7	2.6	2.6	2.8
	Commercial	3.4	5.0	4.4	4.3	4.5	4.2	4.1	4.3
	State	2.1	2.1	2.3	2.3	2.4	2.6	2.3	2.3
N. America	Commercial	5.1	5.2	5.5	6.0	5.2	4.2	4.1	5.0
Pre-Tax Op. Income / Average Assets									
EU15	Cooperative	0.8	0.7	0.6	0.6	0.7	0.8	0.8	0.7
	Commercial	1.4	1.3	0.6	0.5	0.5	0.4	0.3	0.7
	State	1.3	1.3	0.3	0.8	1.1	0.7	0.9	0.9
N.America	Commercial	2.3	2.2	0.5	-0.2	0.7	1.2	1.6	1.2
Return on Assets									
EU15	Cooperative	0.6	0.5	0.4	0.3	0.4	0.3	0.3	0.4
	Commercial	1.3	1.3	0.4	0.3	0.2	0.1	0.4	0.6
	State	1.0	1.2	0.1	0.4	0.7	0.3	0.5	0.6
N. America	Commercial	1.5	1.4	0.3	-0.2	0.5	0.7	1.1	0.8

Source: Bankscope.

Note: Means calculated from bankscope samples of 797 commercial banks, 1,716 cooperative banks and 70 state banks in 15 states of the European Union, and 6,784 commercial banks in the US. We were unable to separate savings banks from special purpose banks in Bankscope sample of 70 state banks.

In terms of capital performance, cooperative banks hold less capital funds than private commercial banks: as a lower percentage of deposits and short term funding, liabilities, net loans and total assets. However, state banks hold almost twice as much capital as private commercial banks as a percentage of deposits and short term funding, liabilities, net loans and total assets. Similar results obtain for data on equity in comparison to custodian and short-term funding, liabilities, net loans, and total assets: Cooperative banks hold less equity than private banks while state banks hold much more. However, Basel Accord Tier 1 capital measurements remain biased toward market-based banks and impatient capital practices at private banks (Lall, 2012); such that market positions count as capital reserves.

Table 7) Capital Quality of Coop, Commercial and State Banks, 2006-12

	Basel 1 Ratio	2006	2007	2008	2009	2010	2011	2012	Mean
EU15	Cooperative	17.2	18.9	15.9	15.4	15.1	14.0	13.8	15.8
	Commercial	14.1	13.8	14.8	17.3	16.6	17.3	30.5	17.8
	State	11.2	10.9	13.0	12.5	14.9	16.2	16.1	13.5
N. America	Commercial	20.4	19.0	19.6	22.1	22.6	23.6	19.9	21.0
Capital Ratio									
EU15	Cooperative	17.8	17.3	16.5	16.4	17.0	17.3	17.4	17.1
	Commercial	16.7	17.2	16.1	17.3	20.0	20.7	21.1	18.4
	State	15.0	14.7	16.6	15.5	17.9	20.2	19.9	17.1
N. America	Commercial	21.8	20.4	21.2	23.6	24.1	25.1	21.2	22.5

Source: Bankscope. Information on sample and measurement, see below.

Note: Means calculated from bankscope samples of 797 commercial banks, 1,716 cooperative banks and 70 state banks in 15 states of the European Union, and 6,784 commercial banks in the US.

In terms of asset quality, alternative banks 1) equal or better private commercial banks in terms of impaired loans as a percent of equity and gross loans; 2) hold lower levels of funds as loan loss provision (in terms of gross loans / net interest revenue / gross loans / impaired loans) and 3) hold similar lower levels of unreserved impaired loans (in terms of equity).

Table 8) Asset Quality of Coop, Commercial and State Banks, 2006-12

		Impaired Loans / Equity	2006	2007	2008	2009	2010	2011	2012	mean
EU15	Cooperative		37.2	35.6	41.8	49.0	57.3	62.5	52.2	48.0
	Commercial		27.2	30.4	39.1	51.9	59.4	69.2	71.1	49.7
	State		24.2	25.2	38.1	56.7	67.8	56.4	64.3	47.5
N. America	Commercial		4.2	7.3	19.1	32.7	27.7	23.2	18.3	18.9
		Impaired Loans / Gross Loans								
EU15	Cooperative		6.7	6.3	6.8	7.5	8.1	8.0	7.0	7.2
	Commercial		3.2	3.3	4.2	6.5	6.5	7.9	9.5	5.9
	State		3.1	3.4	4.0	4.8	5.9	5.9	6.2	4.8
N. America	Commercial		0.6	1.0	2.4	4.6	4.3	3.9	3.2	2.9
		Unreserved Impaired Loans / Equity								
EU15	Cooperative		24.1	22.9	26.9	30.7	37.5	40.4	33.2	30.8
	Commercial		13.2	16.5	19.6	27.6	29.7	37.0	41.4	26.4
	State		14.3	13.7	14.4	28.8	47.1	29.1	32.7	25.7
N. America	Commercial		5.9	11.0	18.9	25.4	21.6	17.3	14.1	16.3

Source: Bankscope. Information on sample and measurement, see below.

Note: Means calculated from bankscope samples of 797 commercial banks, 1,716 cooperative banks and 70 state banks in 15 states of the European Union, and 6,784 commercial banks in the US.

Thirty six difference of means tests of bank performance suggest that alternative banks perform equal to or better than private banks , on average and in three phases of the business cycle; in 2006 before crisis, from 2007-8 amidst crisis, and during recovery 2009-12. These findings confirm aggregate cross national comparisons (Andrianova, 2012) and bank level comparisons (Ayadi etal, 2010; Ayadi etal, 2009) to suggest that institutional foundations of competitive advantage such as the insertion of alternative banks in society, politics and public policy missions *improve* banking; even as measured by indicators taken from banking studies that presume the superiority of private banking and impatient capital.

Conclusion

Allen and Gale (2000) and Hall and Soskice (2001) feared that liberalization could cause longstanding financial institutions to unravel. Liberal market economies have, in fact, marginalized alternative banking groups. In the US, local and regional mutual savings banks peaked in the 1940s to decline thereafter and succumb to crisis in the late 1980s. In the UK, local and regional cooperatives and trust savings banks were consolidated into a single group and demutualized during the 1980s; requiring 5.5 billion pounds to avert failure after crisis in 2007-8. In contrast, liberalization in coordinated market economies has reinforced two, social-economic pillars of banking (and a fourth 'pillar'; i.e. special purpose banks) alongside private and foreign banks.

The consequences appear severe. Transition to one pillar of banking in liberal market economies has magnified Minsky cycles of financial instability,¹⁵ marginalized alternative banking groups, and worsened inequality, capital drain, credit rationing, and other downsides of financialization. Savings banks, cooperative banks and special purpose banks with patient capital strategies and social economy missions provide comparative advantages to coordinated market economies in terms of improved financial stability, lower cost of banking crises, reduced capital drain and credit rationing, and counterforces to inequality and social exclusion.

Our time of liberal predominance (1980-2015) has lasted nearly as long as the period examined by Polanyi (1834-1873). Although he did not mention them, savings banks, cooperative banks and development banks emerged as social reactions of self-defense; in his time and ours. Instead of convergence toward private, market-centered banking, the patient capital practices of alternative banks have provided institutional foundations of competitive advantage over private banks; in his time and ours. Another of his core arguments may also obtain. For Polanyi, among the worst mistakes of liberal theory was to see the industrial revolution as being caused by free markets rather than new techniques of mass production (1944: 33). As new technologies of information and communication transform banking and finance in our time, contemporary banking theory and neo-liberal policy designs risk repeating the same mistake. Estimates of one hundred fold cost reductions suggest that the production frontiers of banking are being shaped not only by freer, more efficient markets, but also by hybrid reforms, path dependent trajectories, and the institutional foundations of competitive advantage of patient capital at alternative banks.

A longer-term historical perspective reveals transformative effects of the gradual accumulation of patient capital at alternative banks (Streek and Thelen, 2005). Concepts and theories from banking studies and heterodox theories of the firm (Biondi, 2005; Hall and Soskice, 2001) clarify the causal logic of patient capital at alternative banks and help overcome the biases in financial economics and banking studies that arise from defining banks exclusively as profit-maximizing financial firms. Theories about banking and competitive advantage (and the large market shares of alternative banks with patient capital) identify causal processes on the micro (bank) level of analysis and make it possible to trace their consequences up through the meso and macro levels of society (Deeg and Jackson, 2007). Focusing on banking thereby promises to help clarify differences both within (Konzleman et al, 2012) and across varieties of capitalism (Deeg, 2010). The destruction of alternative banking institutions in liberal market economies occurred largely as Allen and Gale feared. This has increased bifurcation (financial exclusion) and decreased solidarity and coordination. However, contrary to expectations about convergence and the fears of Allen and Gale, large alternative banking groups in coordinated market economies are longstanding institutions that, instead, have modernized to help reduce bifurcation and sustain solidarity and coordination.

The marginalization of alternative banking groups in liberal market economies has magnified Minsky cycles of financial instability, despite domestic downturns being partially offset by the advantages the US and UK enjoy as global finance centers with reserve currencies (Andrews, 2006). Bank change in coordinated market economies appears to differ from other domains where weakened labor unions, the reduction of employment protection and public pensions, and the dismantling of Welfare State policies and institutions have prevailed. Further study of similarities and differences in

¹⁵ See special issue of *Accounting Economics and Law*, a *Convivium* entitled 'Banking, Finance, and Minsky's Financial Instability Hypothesis' in 2013, volume 3.

bank change across advanced economies is needed. However, substantial evidence supports our claim: That cooperative banks, savings banks, and special purpose banks have used patient capital practices to reinforce cooperation across firms, households, and governments toward social missions or public policies such as human development, social services, culture, the greening of industry, and support for small and medium enterprises. The persistence of alternative banking groups matters; it also provides analytic opportunities to recover a rich variety of largely lost theories, concepts and epistemic communities about social banking and patient capital from the past to reassess change in the present.

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