

## **FINANCIAL INNOVATION IN SWITZERLAND: INNOVATIVE STRATEGIES IN TICINO'S BANKS**

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**Abstract:** The present study, upon trying to explain the nature of innovation in the banking sector, also aims at verifying if banks are in fact as innovative as statistics based on CIS (Community Innovation Survey) in several European countries suggest (Napoli, 2008b). Furthermore, the present work also contributes to the theoretical debate. In fact, a new view is proposed in order to assess innovativeness of banks, which bases on their propensity to finance innovative projects. With their allocating decisions, financial intermediaries act as a multiplier of innovative capacity and hence overtake a leading role in driving innovative forces.

**Key words:** Innovation on Banks, Community Innovation Survey

## 1 - Basic definitions

### Types of innovations

According to Frame and White (2004), financial innovations can be grouped as new products (e.g., adjustable rate mortgages), new services (e.g., on-line securities trading, Internet banking) new “production” processes (e.g., electronic record-keeping for securities) or new organizational forms (e.g. Internet-only banks). In the present work, however, we simplify the classification: we distinguish between product, process and organizational innovation. However, since production, delivery and consumption in services often occur at the same time, we report some useful operative distinguishing guidelines<sup>1</sup>:

- If the innovation involves new or significantly improved characteristics of the service offered to customers, it is a *product innovation*
- If the innovation involves new or significantly improved methods, equipment and/or skills used to perform the service, it is a *process innovation*
- If the innovation involves significant improvements in both the characteristics of the service offered and in the methods, equipment and/or skills used to perform the service, it is both a product and a process innovation.

Finally, more formally, “*organisational innovation* is the implementation of a new organisational method in the firm’s business practices, workplace organisation or external relations”<sup>2</sup>.

It is worth noting that in some cases, different types of innovation may coexist. As an extreme example, internet banking involves simultaneously organizational, process and product innovation.

## 2 - Degree of novelty

We further analyse innovations according to their degree of novelty, which refers to the usual distinction between incremental and radical innovation. Following the Oslo Manual (OECD 2005), the minimum requirement for an innovation is that the product or process be new (or significantly improved) to the firm. Hence, products or processes *new to the firm* are the “weakest” form of innovation that we recognize. Furthermore, products or processes *new to the market* are characterized by a higher degree of novelty, but in both cases (products new to the firm and new to the market) the type of innovation is to be considered as incremental. In the extreme case, products or processes which completely break with the tradition and bring about dramatic changes are defined as radical innovations.

Finally, banks are considered radical innovators, first movers, innovators or non-innovators according to the degree of novelty of the products and processes recently introduced.

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<sup>1</sup> see Oslo Manual (OECD 2005), p. 53

<sup>2</sup> Ibid., p. 51

<b>Product/process</b>		<b>Firm</b>
Radical innovation	→	Radical innovator
New to the market	→	First mover
New to the firm	→	Innovator
None	→	Non innovator

### **3 - Research questions**

Following points are addressed in the research:

#### **A. Innovation in The Banking Sector**

1. New products introduced in the last year. A brief but complete description has been asked to interviewees, distinguishing between products new to the firm and new to the market. After the interviews further evaluation of the presented innovations has been carried out in order to weigh up their degree of novelty.
2. New processes developed in recent years. A brief but complete description has been asked to interviewees, in order to evaluate the true innovativeness of the new processes.
3. Hampering factors to innovation (e.g. costs, weak demand, no supply, innovation doesn't have a strategic role...)

#### **B. The Competitive Environment**

4. Banks and their competitors. How intense is the competition in the covered segment? How many competitors produce the same products? Do banks compete on innovation?
5. Relationship to Universities. Do banks have systematic relationships to Universities? What are their goals? Do universities serve as partners to develop innovative solutions?

#### **C. Financing Innovative Projects**

6. The role of bankers as innovation multipliers. Do banks support innovative projects, start ups or new companies? Is the decision to finance entrepreneurial projects influenced by the innovativeness of the submitted projects? Are there specific criteria to evaluate the projects' innovativeness?
7. Banks' participation in firms' capital. Do banks participate in innovative firm's capital? Are there specific criteria to evaluate the participated firms' innovativeness?

### **4 – Methodology**

The research questions are addressed via a qualitative approach. The research bases on personal interviews with managers of banks headquartered in Ticino, as well as with foreign banks also located in Ticino. The advantages displayed by this methodology are in terms of completeness of answers and quality of the information gained. The interviews have been carried out from June to August 2007, which makes the research

particularly interesting given the subsequent world financial crisis. The period under review covers three years, likewise the SIS and CIS surveys in most countries.

The result of the interviews was 11 responses out of 28 requests (39,2%).

## 5 - Research hypotheses

### 5.1 - Innovation in the banking sector

*Hypothesis 1.1: We expect to find no banks which developed radical innovations in the last three years (radical innovators)*

*Hypothesis 1.2: We expect to find a low number of banks developing products new to the market (first movers)*

*Hypothesis 1.3: We expect to find a high number of banks developing products new to the firm (innovators)*

### 5.2 - The competitive environment

*Hypothesis 2.1: We expect to find that competition among banks is tough.*

*Hypothesis 2.2: We expect banks to cooperate with universities to develop innovations based on new theories and on new financial formulas.*

### 5.3 - Financing innovative projects

*Hypothesis 3: We expect banks to be rather conservative and thus we expect them to have a low propensity to finance innovative projects.*

## 6 - The Swiss banking system

Swiss banks have been classified from the Swiss National Bank according to their main function. The groups are: Cantonal banks, Big banks, Regional and Saving banks, Raiffeisen banks, Commercial banks, Stock Exchange banks, Foreign banks and Private bankers. Foreign banks form the largest group, both in the whole country (37%), and even more extremely in Ticino (52%). At federal level, regional and saving banks are widely spread, while in Ticino this kind of banks doesn't exist. This is probably due to the fact that regional and saving banks generally focus on retail activities, while Ticino's core business is private banking.

Stock exchange banks are quite important in the whole country. Raiffeisen banks are widely spread on the territory with 430 outlets, 44 of which are in Ticino.

<b>Banks group</b>	<b>Bank</b>	<b>Year <sup>(1)</sup></b>	<b>Headquarters</b>	<b>Visited office</b>
<b>Cantonal banks</b>	Banca dello Stato del Cantone Ticino	1915	Bellinzona	Bellinzona
<b>Big banks</b>	UBS SA	1998	Basel, Zurich	Manno
	Credit Suisse	1869	Zurich	Chiasso
<b>Raiffeisen Group</b>	Raiffeisen	1902	St Gallen	Bellinzona
<b>Commercial banks</b>	Società Bancaria Ticinese	1903	Bellinzona	Bellinzona <sup>(2)</sup>
<b>Stock exchange bs</b>	Arner bank SA	1994	Lugano	Lugano
	Bank Julius Baer & Co. SA	1890	Zurich	Lugano
<b>Foreign banks</b>	BNP Paribas Private Bank (Switzerland)	1949	Paris, Geneve	Lugano

	SA			
	Banque de dépôts et de Gestion	1933	Lausanne	Lugano <sup>(2)</sup>
	Banca Euromobiliare (Suisse) SA	2000	Lugano	Lugano <sup>(2)</sup>
<b>Private bankers</b>	Wegelin & Co.	1741	St Gallen	Lugano

*Table 1: The selected sample*

<sup>(1)</sup> Refers to the year in which the central location was established

<sup>(2)</sup> Interviews conducted by phone

## 7 - Results of the interviews

In the following, the results of the interviews conducted with bankers are reported in a synthetic way.

As emerges from table 2, none of the analysed banks introduced radical innovations, i.e. products that provided a dramatic break with the past tradition. This is reasonable, since revolutions occur rarely. In the banking sector, likewise in many other sectors, it is more a matter of incremental evolution. In fact, most banks improve existing products by adding slight changes or new services. Three of the analyzed banks introduced in the last three years products which resulted new for the whole market<sup>3</sup>. However, in the most cases these products were developed at central level outside Ticino, while only in the case of Arner they were developed in Ticino. On the other hand, 8 out of 11 banks introduced products new to the firm in the analyzed period. Again, only Arner Bank developed internally its new products. In all other cases innovations have been developed in the headquarters outside Ticino, the secondary locations working as mere adopters. As far as innovation strategies are concerned, 6 banks resulted as strongly committed to innovation, since they pursued innovation in a continuous way. Not only they innovated, but they also valued innovative activities as strategic options to target growth and to sustain competition. In some other cases (specifically Raiffeisen and BDG), new products have been introduced in the market in the last three years as a mere reaction to new products introduced by other players. In this sense they have been denoted as passive players: innovation is not an active strategy, but rather a defensive one. Finally, Banca Stato, SBT and Euromobiliare didn't introduce new products in the last three years, which shows their reluctance to innovation. In this group however, Banca Stato must have updated its offering at some point, since products that it sells today didn't exist ten years ago. This means that its strategy is to introduce new products only when it is forced by market conditions to do so.

In the following, the findings are matched with the research hypotheses to evaluate whether or not they met the expectations.

	Point A: INNOVATION					Point B: COMPETITIVE ENVIRONMENT			Point C
	Radical	New to the market	New to the firm	Innovative location	Innovative strategy	Competitors	Universities (general)	Universities (innov.)	Innovation financing
<b>Banca Stato</b>	no	no	no		Passive	>10	yes	no	yes

<sup>3</sup> We consider Wegelin's "Active Indexing", Credit Suisse's new platform "InvestNet" and Arner's new package "Fam" and as new to the market basing on the interviewees statements.

Credit Suisse	no	yes	yes	External	Active	5	yes	no	no
UBS	no	no	yes	External	Active	5	yes	no	partially
Raiffeisen	no	no	yes	External	Passive	2	yes	no	no
SBT (1)	no	no	no		Passive	6	no	no	no
Banca Arner	no	yes	yes	Internal	Active	>10	yes	no	no
Julius Baer	no	no	yes	External	Active	>10	yes	no	no
Euromobiliare	no	no	no		Passive	>10	no	no	no
BDG (2)	no	no	yes	External	Passive	>10	yes	no	no
BNP Paribas	no	no	yes	External	Active	>10	yes	no	no
Wegelin	no	yes	yes	External	Active	>10	yes	yes	no

**Table 2: Findings in the sample banks**

(<sup>1</sup>) Società Bancaria Ticinese ; (<sup>2</sup>) Banque de dépôts et de Gestion

## 8 - Hypotheses and findings of the research

Basing on the interviews described in the previous paragraph, in the following the findings are matched with the research hypotheses (see chapter 2.4) to evaluate whether or not they met the expectations.

*Hypothesis 1.1 is confirmed. No radical innovation has been introduced into the market in the last three years.*

*Hypothesis 1.2 is confirmed. Three of the analyzed banks are first movers.*

*Hypothesis 1.3 is confirmed. The majority of the analyzed banks are innovators.*

*Hypothesis 2.1 is confirmed. Competition among banks is tough.*

*Hypothesis 2.2 is rejected. Collaboration with universities is not seen as strategically important to develop new products.*

*Hypothesis 3 is confirmed. Most banks are not concerned with financing innovative projects or start ups or with supporting innovation in the surrounding region.*

## Conclusion

The present work substantially confirmed previous findings, since most banks resulted innovators. In addition, through the present approach it was possible to classify banks according to their degree of innovativeness, basing on the degree of novelty of products and processes recently introduced. Accordingly, we could define banks which proved particularly keen about innovation as first movers. Also, we evaluated the ranking of innovation in the strategic choices of banks: some banks resulted as actively involved in innovative activities, while a smaller group considered innovation rather as a passive surviving strategy. Finally, also banks that didn't introduce new products in the last three years (non-innovators) offered innovative products, which means that they update their offering as well, when market conditions force them to do so.

The second crucial finding of the present work was that Ticino is a distribution place rather than being the headquarter of innovative activities. In fact, most of the banks which proved keen about innovation were adopters of innovations developed in the central location. Also, banks located in Ticino were non innovators in three out of four cases. This suggests that banks in Ticino are not the engine of innovation, but rather

adopters. This does not mean that Ticino does not innovate products, services or processes. Only, in most cases it does not develop these innovations on its own: rather, it profits from innovation developed elsewhere.

Hence, the first suggestion is to extend the analysis to more banks located in Ticino, to see if they are more involved in active innovative strategies. In addition, a possible way to extend the present study is to replicate the analysis in the central locations, to check the true commitment to innovation of banks located in Zurich, Bern, Paris etc. Specifically, some particular points would be worth further deepening for each of the following banks:

- BNP Paribas: a deeper analysis on the outcome of its award system could provide interesting insights on how this incentive works: this would be relevant also from a theoretical point of view. Much of the literature on innovation is concerned with “exogenous” incentive systems to foster innovation. What if a simple award system for employees works in a proper way to endogenously stimulate innovation?
- Wegelin: its relationships to the University of St Gallen proved very useful to develop new financial formulas and new products, including structured products. In the literature it is often stressed the growing contribution of universities to the development of financial innovations (Van Horne 1985), to the production of new financial formulas and financial patents (Lerner 2002), but it is not clear what could be the best role for academia (Anderloni 2004). The analysis of the Wegelin case could provide useful insights on this topic.
- Other Cantonal Banks upon Banca Stato launched similar projects to finance innovative start ups (Cantonal Banks in Zurich, Bern, Graubündener Kantonbank); in some cases they were more successful than the one developed in Ticino. A comparison between them could help in understanding possible mistakes and some ways to improve the success of Cantonal Banks financing innovative projects.

## Bibliography

- ANDERLONI L. (2004), L'innovazione finanziaria: una tematica d'attualità?, in *L'innovazione finanziaria*, Osservatorio Newfin 2004, Bancaria Editrice
- ARVANITIS et al. (2007), *Innovationsaktivitäten in der Schweizer Wirtschaft*, Staatssekretariat für Wirtschaft (SECO): Bern
- BOOT W.A., THAKOR A.V. (1997), Banking Scope and Financial Innovation, *The Review of Financial Studies*, Vol. 10, No. 4, pp. 1099-1131
- CENTRO STUDI BANCARI (2006), *La piazza finanziaria ticinese*: Lugano
- DOSI G. (1988), Sources, Procedures, and Microeconomic Effects of Innovation, in: *Journal of Economic Literature*, Vol.26, n.3 (September), 1120-1171
- FAGERBERG J., MOWERY D.D., NELSON R. (eds.), *The Oxford Handbook of Innovation*, Oxford University Press
- FRAME W.S., WHITE L.J. (2004), *Empirical Studies of Financial Innovation: Lots of Talk, Little Action?*, *Journal of Economic Literature*, Volume 42, Number 1, pp. 116-144(29)
- ISTAT (Istituto Nazionale di Statistica, 2006), *L'innovazione nelle imprese italiane*, anni 2002-2004
- LERNER J. (2002), Where Does State Street Lead? A First Look at Financial Patents, 1971-2000, *Journal of Finance*, vol. 57, pp. 901-930
- MERTON R.C. (1992), Financial Innovation and Economic Performance, *Journal of Applied Corporate Finance*, 4, 12-22
- MILLER M.H. (1986), Financial Innovation: The Last Twenty Years and the Next, *Journal of Financial and Quantitative Analysis*, 21, 459-471
- NAPOLI R. (2009), "L'innovazione nel settore finanziario: review della letteratura tra neoclassici ed evolutivi", *Banca Impresa Società* (Il Mulino), n.1/2009, pp. 95-124
- NAPOLI R. (2008a), 'Innovation in the Financial Sector: Persistence and Schumpeterian Hypotheses. Econometric Evidence in Germany', *Journal of Service Science and Management*, Vol. 1, N.3, pp. 215-226
- NAPOLI R. (2008b), 'L'innovazione finanziaria in Italia e Germania: statistiche descrittive e considerazioni teoriche', *Bancaria*, n. 2008/1, pp. 90-102
- NELSON R., WINTER S. (1982), *An Evolutionary Theory of Economic Change*, Cambridge University Press
- NEWFIN (Centro Studi sull'Innovazione Finanziaria, 2004), *L'innovazione finanziaria*, Bancaria Editrice
- OECD (2005), *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data*, third edition
- PEREZ C. (2004), Finance and Technical Change: A Neo-Schumpeterian Perspective, to appear in Hanusch H. and Pyka A. eds., *The Elgar Companion to Neo-Schumpeterian Economic*, Edward Elgar, Cheltenham
- TUFANO P. (1989), Financial Innovation and First-Mover Advantages, *Journal of Financial Economics* 25, pp.213-240
- VAN HORNE J.C. (1985), Of Financial Innovations and Excesses, *Journal of Finance*, 40, 621-631