

A FUNCTIONAL APPROACH TO THE INSURANCE INDUSTRY

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Article abstract

Despite the all-embracing nature of the term "financial services", there is a clear distinction in most people's mind between, for instance, the status of policyholders and bank customers. Indeed, the mere existence of banks and insurance companies is taken for granted. This being said, the recent changes - not to say upheavals - that have shaken the world of financial markets and institutions call for a drastic revision of our perception and understanding of the role of financial institutions. The financial markets have developed a steadily growing range of instruments and techniques that have boosted their roles in our economies. Many observers do question the benefits of this massive expansion of what they call "the virtual economy". For instance, they claim that the current pace of financial innovations may eventually lead to an increase in systemic risk. They fear significant disruptions that the proliferation of derivatives may cause to the real economy. This article challenges this view. It focuses primarily on insurance companies. Insurance policies and put options are very close relatives. This parenthood carries far-reaching implications that we try to explore in the following pages.

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ABSTRACT

Despite the all-embracing nature of the term "financial services", there is a clear distinction in most people's mind between, for instance, the status of policyholders and bank customers. Indeed, the mere existence of banks and insurance companies is taken for granted. This being said, the recent changes – not to say upheavals – that have shaken the world of financial markets and institutions call for a drastic revision of our perception and understanding of the role of financial institutions. The financial markets have developed a steadily growing range of instruments and techniques that have boosted their roles in our economies. Many observers do question the benefits of this massive expansion of what they call "the virtual economy". For instance, they claim that the current pace of financial innovations may eventually lead to an increase in systemic risk. They fear significant disruptions that the proliferation of derivatives may cause to the real economy. This article challenges this view. It focuses primarily on insurance companies. Insurance policies and put options are very close relatives. This parenthood carries far-reaching implications that we try to explore in the following pages.

RÉSUMÉ

Les compagnies d'assurances sont souvent considérées comme des institutions très différentes des banques. Pourtant, les évolutions récentes des marchés financiers tendent à effacer les frontières entre institutions financières. De nombreux observateurs s'inquiètent de cette irruption des marchés financiers sur la scène économique. Cet article plaide en faveur d'une vision nouvelle des institutions financières, dont l'inspiration est précisément issue des innovations développées en permanence sur les marchés financiers.

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■ INTRODUCTION

We all use financial services. We have used them in the past or will use them in the future. By acquiring financial services we become policyholders, borrowers or savers. Despite the all-embracing nature of the term “financial services”, there is a clear distinction in most people’s mind between, for instance, the status of policyholders and bank customers. Indeed, the mere existence of banks and insurance companies is taken for granted. Their respective products and services are not perceived in the same way. For instance, many consumers consider the payment of a property-casualty insurance premium to be a different decision from that of buying a mortgage. Admittedly, these distinctions do not come out of the blue. They are fostered and, quite often, maintained by numerous regulatory, fiscal and institutional factors.

This being said, the recent changes – not to say upheavals – that have shaken the world of financial markets and institutions call for a drastic revision of our perception and understanding of the role of financial institutions. The financial markets have developed a steadily growing range of instruments and techniques that have boosted their roles in our economies. For example, in the United States, commercial banks have been driven out from their traditional mortgage market through the intensive use of securitization techniques. New asset classes are created as a result. Capital markets show a significant appetite for risks that were up to now the domain of insurance and reinsurance companies. This seemingly insatiable appetite raises obviously many challenging questions, not to say concerns, about the future of financial intermediaries.

Indeed, many observers do question the benefits of this massive expansion of what they call “the virtual economy”. For instance, they claim that the current pace of financial innovations may eventually lead to an increase in systemic risk. They fear significant disruptions that the proliferation of derivatives may cause to the real economy. This article challenges this view. Indeed, there is a “derivatives way of looking at things”. Derivatives are not only financial assets traded on either organized markets or OTC markets. They are more than this. They deliver a very powerful framework to decipher the current trends affecting the marketplace and the future of financial institutions. This article focuses primarily on insurance companies. Insurance policies and put options are very close relatives. This parenthood carries far-reaching implications that we try to explore in the following pages.

The article is organized as follows. In the next section we revisit history. We follow a Genoa merchant of the Middle Ages whose entrepreneurial venture required some sophisticated risk transfer techniques. The lessons that one can draw from this historical experience are particularly useful. The second section describes the traditional approach to financial intermediaries with a strong emphasis on insurance companies. The following section challenges this rather old-fashioned view and discusses new angles to deepen our understanding of the future of insurance and reinsurance companies. The fourth section draws the far-reaching implications of this “brand new world” for insurance companies and financial intermediaries in general. A last section discusses some further broader implications.

■ THE GENOA MERCHANT

Quirks of Mother Nature have always been threatening mankind. In ancient times, peasants whose sole means of subsistence were agricultural had to resort to some naïve pantheon animated by benevolent saints and gods. In Burgundy, a French province famous for its magnificent wines, wine growers prayed Saint Medard and Sainte Barbe for a clement nature. Saint Medard was venerated on the grounds of his ability to make rain while Sainte Barbe was invoked to chase away lightning. This celestial type of coverage was usually rounded-off by some more terrestrial type of hedging. For instance, sea navigators would not only pray saint Guenole but also arrange some contracts to mitigate their exposure to sea perils.

Indeed, marine navigation has always been a hazardous venture. This was one of the main risks facing medieval businessmen. The list of dangers was endless! Storms, hurricanes and corsairs could destroy a merchant’s efforts and capital. This concentration of risks at a single point, the ship, made travel by sea a perilous undertaking ! It threatened to slow down the growth of trade. Yet marine trade continued to grow and to link more and more remote geographical points. Merchants began to use larger vessels, capable of sailing farther from the coast. They were given escorts to discourage attackers. This raised the cost of trade since escorts had to be paid. In Venice, merchants had a choice. They could use private ships without escort. Or, for an additional fee, they could use official vessels, sailing under protection. The choice was difficult.

There is no doubt that armed fleets discouraged the boldest pirates, but their price was prohibitive and cut profits down. It was cheaper to forego armed protection, provided the ship reached its destination! Ship-owners in Marseille dealt with this dilemma by inventing the system of the “crown” to spread the risk over several merchants. In 1387, 14 merchants from Marseille formed a crown to operate a ship at a total cost of 2,000 florins. Every participant contributed from 30 to 200 florins. While this limited the individual risk, the risk was not entirely transferred. Some risk-sharing improvements were necessary.

In the year 1298, a Genoa merchant named Benedetto Zaccaria had to ship 30 tons of alum from Aigues-Mortes to Bruges where he had located a buyer. Zaccaria was aware of the contingencies. With the help of two Genoa financiers, Baliano Grilli and Enrico Suppa, he struck a quite interesting deal. They designed a contract to shift the risk away from Zaccaria’s business. The deal was the following. Zaccaria sold the alum to Suppa and Grilli on the spot at an agreed price. The alum was then loaded on the vessel that headed to Bruges. If the vessel reached Bruges safely, Zaccaria was committed to repurchase the alum from Suppa and Grilli. He would then sell it to his local client. The repurchase price was obviously much higher than the price of the initial spot transaction. If things went wrong, say because of a storm, and the alum went lost during the maritime trip, Zaccaria would not owe anything to Suppa and Grilli. In other words, Suppa and Grilli granted Zaccaria an option to default on the repurchase transaction. A modern economist would simply say that the three Genoa businessmen had come up with a non-linear risk sharing rule. Viewed from Zaccaria’s standpoint, the risk sharing rule is convex. He was long an option to default. Moreover, the transaction offered the considerable advantage of being accepted by such scholars as Saint Thomas, who condemned by the very notion of interest rate. The transaction between Zaccaria and Suppa and Grilli was more subtle, since it involved only sales and repurchase operations. The theological concept of *Damnum Emergens* prevailed: There was a physical risk that was considered legitimate to compensate. Thus, two problems were solved simultaneously by a single structure. Zaccaria did not abandon his role as a merchant. On the contrary, the transfer of an exogenous risk to people who felt capable of underwriting it enabled him to focus better on his business. The physical and ecclesiastical tyrannies were discarded. Suppa and Grilli negotiated an attractive repurchase price, and underwrote Zaccaria’s marine risk without incurring the wrath of ecclesiastics.

But can we say more about Suppa and Grilli? Were they insurers, bankers or derivative traders? Did Zaccaria subscribe an insurance policy? Did he strike an investment banking deal or a pure capital market transaction? Bankers will obviously claim the paternity of the deal. After all, Zaccaria paid no upfront premium to Suppa and Grilli. Nonsense, insurers would say. Suppa and Grilli acted as an insurance company since they agreed to underwrite the entire burden of the risk. In other words, Zaccaria signed an insurance contract with Suppa and Grilli. Interestingly enough, Zaccaria was not even trying to describe himself as an insured or as a bank client. What mattered to him was to be relieved from a risk that was outside his talent and control.

Yet this answer does not satisfy either insurers or bankers. Twentieth-century insurers dislike being compared to bankers and the reverse is probably also true. In other words, if Suppa and Grilli were insurers they could not be bankers and vice-versa. This being said, modern consumers of financial services do also draw a line between banks and insurance companies.

This is hardly surprising. Banks and insurance companies are usually subject to different regulations and governed by different supervisory authorities¹. Both have their own industry organizations. For consumers, the regulations of bank loans are different from those of insurance contracts. If they were living in the 20th century, Enrico Suppa and Baliano Grilli would have to opt for a precise “institutional status”, while Benedetto Zaccaria would have to choose whether to be a bank client or a policyholder.

■ **BANKING AND INSURANCE: THE TRADITIONAL APPROACH**

Obviously, many factors have contributed to this differentiation between banks and insurance companies. For example, insurers have energetically pleaded their case and advocated the uniqueness of their business. This distinction is traditionally fueled by three key arguments: the so-called inversion of the insurance production cycle, liability risk-taking and duration of liabilities.

The first argument is quite frequent in major actuarial sciences and insurance management textbooks. The argument states that the insurance production cycle is unique. The sale price of insurance (premium) has to be determined before its true cost price (claims

cost) is known. The insurance company does not know whether a loss will occur and what its amount will be. At best it will be able to rely upon the law of large numbers by grouping a large cohort of policyholders within the same insurance portfolio. Insurance pricing therefore requires a very special expertise. This is why insurance companies hire these rocket scientists known as “actuaries”.

According to the second argument, an insurance company selling an insurance contract accepts a contingent commitment that adds to its liabilities. Conversely, a banker granting a real estate or commercial loan holds a claim that is added to its assets. The insurance company is a debtor to its client. Writing an insurance contract is tantamount to issuing a promise.

The third argument focuses on the length of commitments accepted by insurance companies, especially life insurance companies. Annuity payments span a significant length of time. The servicing period can even be longer than expected due to the effects of the longevity risk.

These arguments tend to suggest that things have changed since the 13th century. Indeed, insurance companies seem to have become unique animals not to be confused with banks. This distinction is however misleading. Banking and insurance are not really dissimilar activities. Benedetto Zaccaria knew this a long time ago!

The first argument can be discarded by two simple examples. Options market quote call and put prices even though option buyers and sellers do not know in advance whether their options will be exercised or not. Banks do grant prepayment options on mortgages. Accordingly, banks have to price a provision that may or may not be used by the client. Suppa and Grilli were in the same situation. They did not know whether Zaccaria would call them in to bail him out or whether he would complete his transaction according to plan. In case of a loss at sea or an act of piracy, Zaccaria would exercise his default right. As a matter of fact, these examples boil down to saying that insurers practice prose without knowing it: Selling an insurance contract is tantamount to selling an option! The policyholder pays a premium for the right to transfer his loss to the insurance company. Functionally, an insurance contract and an option perform the same service. The put holder has the guarantee that the value of the asset at risk is protected by the put. Automobile insurance is a good example. When a loss exceeds the insurance deductible, the policyholder exercises his right to indemnification. He then perceives the difference between the value of his loss and the deductible. By contrast, if the loss is less than the deductible, it

is paid for by the policyholder. The boundaries between insurance and derivatives are quite blurred. The recent development of the so-called catastrophe bonds offers another good example. These bonds are characterized by the fact that their coupons and/or their principal are exposed to the occurrence of natural catastrophes. Their potential yield is usually high in order to compensate the lender for the possible loss of the coupons and/or principal he is entitled to. In other words, the lender acts as if he were an insurance company. He insures the borrower against damages caused by the occurrence of natural catastrophes. In case of a claim, the borrower reimburses nothing and can therefore use the funds that are not reimbursed to fund his losses. For example, Winterthur, the Swiss insurance company, recently floated a bond in order to hedge itself against hail risk. A strong hailstorm can trigger significant damages to cars. Traditionally, insurance companies cede part of their risks to reinsurance companies. Winterthur has chosen another institutional arrangement for its hail risk. Winterthur transfers the risk to the financial market by means of an instrument that bears a strong resemblance to the solution used several centuries ago by the Genoa merchant Benedetto Zaccaria!

The second argument is also quite easy to dismantle. Bank deposits can be viewed as providing liquidity insurance. A depositor knows that in case of unexpected liquidity needs he can totally or partially cash out his deposit. The analogy with insurance is even stronger: Because of the law of large numbers, not everybody is expected to run and withdraw his deposit. The very notion of risk mutualization is precisely at the heart of the insurance industry. To make the counter-argument even more convincing, the case of indexed certificates of deposit issued by banks can be referred to. Banks offer deposits whose return is composed of a fixed component and a variable component pegged to some index. By issuing such deposits banks are indeed taking risks: they guarantee a floor and add up a potential bonus.

The third argument is also a compelling one. Life insurance companies insist frequently on the long maturity of their liabilities. This long-term view stems from the actuarial dimension of insurance liabilities. A typical example is the life annuity that is paid until death which may occur very late. Until recently as stressed by Wright (1991), "*portfolio philosophy in the life insurance business was centered on the matching of assets and liabilities... The traditional practices of buying long-term bonds and mortgages and holding them to maturity were based on the long duration of liabilities*". Wright hastens to add that today "*a rethinking of the duration*

of these (insurance) products is essential". This rethinking is not only urged by the redesign of life insurance policies but also by the pressure of competition. Insurance agents bring considerable pressure on companies' headquarters to set initial rates high enough to match competition and keep them high in the future even though interest rates might have fallen down. These interwoven effects challenge the long view of insurance liabilities. The duration, in other words the interest rate risk exposure of insurance liabilities, is not only a matter of mortality table and proper discounting. It is significantly affected by "the geometry" of the contractual liability cash-flows. Because insurance liabilities are not traded and because accounting practices tend to distort the cash-flow picture, this last point is not clearly understood. A lot of insurance companies still manage their liabilities using a long term horizon while they should generally be shooting at a much shorter time frame.

All this suggests that the traditional analysis of insurance companies must be revisited. There is much to be learned from the so-called convergence between insurance markets and financial markets. For instance, there is no divorce between insurance markets and derivatives markets. An insurance contract fulfills the same function as a put option. In a nutshell, traditional insurance underwriting and derivatives writing are the two sides of the same coin .

■ THE VIRTUAL ECONOMY AND THE NEED FOR FUNCTIONAL ANALYSIS

The Genoa merchant wanted to protect his business against sea hazards and the threats of piracy. He was primarily interested in transferring his risk to outside players. He went for a hybrid solution in 1298 that could have been engineered either by an insurer, a speculator or a banker. The key question is therefore not whether there is a "genetic" difference between insurance companies and banks. The question is whether Zaccaria can focus on his core talent without the fear of adverse outcomes that are outside his control. Fortunately, a vast array of solutions, of institutional arrangements is available, including banks, insurance companies, and financial markets. This makes it possible to select the optimum institution for the function that needs to be fulfilled. It is rather fortunate that modern capital markets provide effective tools that try to span more and more risks. In other words, there is no "black hole" between the so-called "real" economy and the so-called "virtual" economy. The

virtual economy is much useful since it aims at eradicating the opacity and incompleteness of the real economy. It empowers market players by enabling them to retain only those risks that are fundamentally tied to their talents. By lifting the veil and reducing opacity, the virtual economy puts the real economy to test. The Genoa merchant transported and sold alum. Once freed from the dangers of the sea, he still had to show that his business was useful and viable and to prove his know-how. The same applies to banks and insurance companies. They have to show their clients that their services and products are useful and legitimate. This is not easy to prove. In the United States, commercial banks have gradually been driven out of the mortgage market. Their market share has been taken over by the financial markets and investment banks. Today, mortgages are tradable on a buoyant market, namely the mortgage backed securities market. In other words, mortgage financing has taken another route than the one it traditionally used.

The virtual economy also holds considerable promises for anyone with a genuine expertise. A few years ago, it was hard to imagine that anyone could diversify his expertise without taking the risk of losing it. The example of fund managers is a very telling one. Every day, fund managers are engaging in a sort of alchemist quest: maximum yield at minimum risk! For years Swiss fund managers have been active players of the private banking market. Still, the private banking market is no longer the unique privilege of Swiss private bankers. New competition has arisen. This competition is not only due to the fragility of the otherwise famous Swiss confidentiality. There is more to it. For instance, a US fund manager specialized in US corporate bonds who swaps the performance of an American corporate bond index against a Swiss equity index is a formidable competitor to the Swiss private banker. Using such a swap, he is able to turn a US corporate bond portfolio into a Swiss equity portfolio. For example, this can be achieved as follows. A client wants a very talented corporate bond manager to invest SF 100 million in the Swiss equity market. The manager could refuse on the grounds that he is not an equity manager. Still, the manager accepts. He invests the sum in the corporate bond portfolio that he manages. He simultaneously swaps the performance of the US corporate bond index against the performance of the Swiss equity index. Thanks to this exchange, the real bond portfolio has become a virtual Swiss equity portfolio. Although its physical structure has not changed, its cash-flows walk and talk like Swiss equity cash-flows. Say that the US corporate bond index exhibits an 11% return while the Swiss equity index shows a 12% return. Because of his genuine expertise, the bond manager has outperformed the US

corporate bond index by 1% (after deducting his fees). What does this mean for the Swiss client? He receives a profit equal to 12% + (13% - 11%). He gets 14%! Although the US corporate bond manager knows nothing about equity and even less about the Swiss market, the magic of the swap enables him to export his know-how without leaving home!

Competition has soared. Banks, insurance companies and financial intermediaries are therefore now facing significant challenges. They cannot escape the mind-boggling question: "What is my value-added and how can it be exported and improved?" According to an old saying someone who is good at everything is good at nothing. But to be good at everything, one has to be good at something. In a sense, modern finance resembles Proteus, the Greek god of the sea, who could change form at will.

Insurance companies are not spared by the emergence of the virtual economy. In the United States, catastrophic and weather risks are now traded on either organized or over-the-counter markets. The implications are tremendous. The convergence between insurance pricing and financial pricing is, for example, a fascinating issue. It will trigger major changes in the insurance industry. Think for instance of credit insurance and credit derivatives. The price discrepancies between the two markets are huge. Even after factoring contractual provision differences in the equation, it is difficult to reconcile the two pricing schemes. In the interim convergence phase this situation entails rather "juicy" arbitrage opportunities.

■ SHOULD INSURANCE COMPANIES BE AFRAID OF THE BIG BAD WOLF?

Thanks to virtual derivatives engineering, market-players can express their talents, whoever and wherever they are. If there is one tyranny of virtual "derivatives" finance, this is clearly the one. Using modern financial instruments, the virtual economy constantly puts the real economy to test. Modern finance is very demanding and challenging. It is engaged in a constant process of renewal where old formulas die and make way for new solutions. Contrary to appearances, this powerful drive owes its strength to the magnitude of the daily problems faced by players in the real economy. Seven centuries later, it seems quite normal that Benedetto Zaccaria did not care whether Enrico Suppa and Baliano Grilli were insurers

or bankers. The important thing for Zaccaria was to ensure that his ship and merchandise would reach their destination. In case of loss at sea, it was essential for the Genoa merchant to avoid a disastrous bankruptcy that would have endangered the future of his function. This was the primary task of Suppa and Grilli. The virtual economy fulfills the same task on a much broader scale. Banks and insurance companies are not totally different animals. Both face similar challenges. A meticulous inventory of their institutional differences may be quite misleading. By putting on virtual glasses, the careful economic observer will avoid this mistake and focus on the issues that really matter.

Careful analysis shows that insurance companies mainly market options. Can they remain competitive despite the formidable developments of derivatives markets? Insurers can argue that the options that they sell to policyholders are highly complex. An insurance contract is nothing but an option whose underlying asset (i.e. the claim) may be manipulated by the policyholder. This is the well-known phenomenon of moral hazard. Insurers fear negligent or even fraudulent behaviors on the part of policyholders. Insurers face also difficulties in assessing the actual true risks of their policyholders. To use the jargon of the options market, insurance companies have a rather difficult task determining the exact volatility of the underlying asset they are insuring. In other words, it is not easy for insurers to calibrate precisely the risk category to which a given policyholder should be assigned. Insurers are intimately acquainted with this phenomenon, known as anti-selection. Smooth operation of contracts is hampered when insurers lack information on clients. This explains why insurers are obliged to structure insurance policies that seem extremely complex and sometimes unfair to policyholders. Deductibles, bonuses, penalties and limits on covers are many safeguards to ensure the viability of insurance contracts. Baliano Grilli and Enrico Suppa were facing similar obstacles when they agreed to cover Benedetto Zaccaria's risk. For example, there was no way of knowing whether Zaccaria would not be tempted to declare the loss of his goods even though they had reached their destination. To counter this risk, Suppa and Grilli could hire an assistant to travel with the merchandise and keep an eye on the precious cargo. In Bruges, the cargo could be checked immediately by another assistant. While this is not a perfect solution, it would have minimized the risk of fraud.

In the professional parlance of insurers, the producer is the underwriter who writes the insurance policy. However, the virtual economy shows that the true producer is the financier who has to

cook the relevant ingredients, i.e. the financial assets needed to guarantee successful completion of the insurance policy. The financial markets provide the place where companies can gather the financial inputs required in order to match their liabilities. This is where the very notion of asset-liability management pops into the picture. Again, (derivative) assets can be viewed as the tools that an insurance company can rely upon to fulfill the functions demanded by its clientele base.

The lesson is clear. Functions are always senior to institutions (Merton (1995)). To put it more crudely, clients, consumers come first. This being said, the growing importance of the virtual economy and finance is no cause for fear. On the contrary, by shifting the focus of attention from institutions to functions, the virtual economy invites market players to use their imagination to improve their services. Far from disrupting the real economy, virtual finance improves its vitality. To sum up, the big bad financial wolf is for once the good guy, rather than the cruel and unpredictable tyrant that many observers fear.

■ GLOBAL FINANCE OR HOW NOT TO CHOOSE THE WRONG OPPONENT

Modern finance is cosmopolitan by nature. Cash-flows do not carry passports. In 1994, a French philosopher, Pascal Bruckner, wrote the following about cosmopolitanism: "Moving from one civilization to another is like shedding one's skin, a metamorphosis which involves toil and work; a far cry from the smooth flight of the business jet that links all points on the planet". According to Bruckner, cosmopolitans, border-less people, "bring out something essential, upset opinions, bare the lie of closed societies". Moving from one risk to another is similar to shedding one's skin, a metamorphosis via the virtual economy. The fact that the transactions implied are almost instantaneous does not mean that work and toil have vanished. Understanding and fighting the tyranny of the real economy requires wisdom and pugnacity. This is something that is not well understood as witnessed by the recent essay literature. In 1995, the French sociologist, Ignacio Ramonet, coined the "scary" notion of a "PPII" system: planetary, permanent, immediate, immaterial. Again, virtual finance is not cosmopolitan because fax machines, networks and computers ensure a worldwide presence. A securities trader is not a man with "Hermes shoes", fascinated by

the geographical universality of his trading power. Paul Morand, the French diplomat and novelist, also took a harsh view of these busy financiers: "Who is that savage lying in the sand, who only eats fruit and is ordered to maintain absolute silence? It's a banker from New York doing a rest cure." However, on the next page he qualifies his message, by adding that "Mercury, the god of trade as well as speed, was probably the inventor of arbitrage on the stock market."

Despite the divine benediction of Mercury, the nomadic nature of virtual finance is disliked and even feared. As François Rachline pointed out in 1991, "Today, the temptation is to assert that governments are no longer able to contain economic flows in both meanings of the word "contain": block and monitor." Edgar Morin and Samir Nair (1997) note that "by losing control of capital circulation society has lost control of the monster it has created", adding that "vast sums circulate daily without anyone knowing what they are for or which financial disaster they will cause". This, too, is the wrong perspective. The fluidity of modern finance is in sharp contrast with the viscosity of the real economy. The result is a striking paradox, that prompts people to react and protest against the fluidity and to denounce the universal dictatorship of modern finance. Strangely enough, people have much less to say about the viscosity of the real economy that penalizes us. Benedetto Zaccaria's talent and audacity are tangible. Yet they may be undone by adversity in the physical world. Baliano Grilli and Enrico Suppa merely enable Zaccaria's undeniable qualities to express themselves for the good of the greatest number. The virtual economy pierces and even removes walls. Some, like Jean Chesneaux (1996), consider this globalization an inevitable march toward a dull and colorless world. The most pessimistic observers are afraid that the world will become tasteless; that tastes and scents will become uniform and that diversity will be lost forever. The famous novelist Milan Kundera (1989) even expressed the fear that we would resemble each other more and more. According to him, the virtual economy would be synonymous to a lawless and faithless Coca-Cola economy. This seems a hasty conclusion. Granted, one should not revert to evangelism and only praise the benefits of the virtual economy and finance. Nor should one introduce a liberal theological dogma that Philippe Engelhard (1996) fears. One should merely keep enthusiastic eyes and an open mind, without which the real challenges will be missed. An open attitude does not necessarily mean loss of identity and insipidity. By contrast, a closed attitude leads almost always to deterioration. In contrast with a global approach, a local approach offers only a limited capacity to share risks and to

pool talent. The lesson of the virtual economy is therefore rather unusual: local wealth can only survive by developing and accepting forms of openness.

The tyranny of the real economy is probably just as destructive as Charybdis, that ancient whirlpool in the strait of Messina. This said, it is wrong to believe that we are victims of a virtual Scylla that will swallow us no matter what happens or what we do. Despite Scylla and Charybdis, despite pirates and storms, Baliano Grilli and Enrico Suppa removed Benedetto Zaccaria's risks. Their task was difficult. It needs to be reinvented again and again. In any case, Suppa and Grilli knew that insurance underwriting and derivatives writing are the two sides of the same coin.

References

- Briys, E., and de Varenne, F., "La mondialisation financière : enfer ou paradis?", *Economica*, 1999.
- Chesneaux, J., "Habiter le temps", Bayard Editions, 1996.
- Engelhard, P., "L'Homme mondial : les sociétés humaines peuvent-elles survivre?", Arléa, 1996.
- Kundera, M., "The Art of the Novel", 1989, Harper Collins, 1989.
- Merton, R.-C., "A Functional Perspective of Financial Intermediation", *Financial Management*, vol. 24, Summer 1995.
- Morin, E. and Nair, S., "Une politique de civilisation", Arléa, 1999.
- White, L., "The S&L debacle", OUP, 1991.

Note

1. It is interesting to note that some countries have just merged their bank and insurance regulatory authorities, for example Great Britain and Canada with its Office of the Superintendent of Financial Institutions.