0xRISK INSIGHTS | RISK MANAGEMENT

Risk should not be avoided. It should be understood and managed.

Pedro Geyerhahn | Founder & Managing Partner, 0xRisk

Risk is part of doing business

The word “risk” often carries a negative connotation. In many companies, managing risk is still interpreted as reducing exposure, avoiding volatility and preventing something from going wrong. But a company that tried to eliminate every risk would probably eliminate a large part of its opportunities to create value as well.

Extending credit involves risk. Investing involves risk. Holding inventory involves risk. Buying a company, raising debt, hiring people, launching a product, operating in another country - or deciding to do nothing - also involves risk. The objective, therefore, is not to eliminate risk. It is to know which risks the company is taking, why, in what amount, for how long and who is accountable for them.

This view is consistent with international frameworks. ISO 31000 treats risk management as part of governance, strategy, planning and decision-making; COSO connects Enterprise Risk Management directly to strategy and performance. The OECD goes even further: risk-taking is a fundamental force behind entrepreneurship, but failures in risk management can destroy far more value than is usually imagined.[1][2][3]

My own relationship with Risk Management began long before I used the term in any structured way.

More luck than judgment: my first major lesson in risk

In July 1994, I had a little over one year of professional experience in finance and was working as a financial analyst at Latasa, a multinational industrial joint venture in Brazil. A significant part of the company’s liabilities was denominated in U.S. dollars - short-term import financing and long-term debt - while virtually all available liquidity was invested in local floating-rate instruments linked to the CDI benchmark.

It was a significant currency mismatch. Yet, at the time, the exposure simply was not being measured as a consolidated risk.

The context made the experience unforgettable. Brazil’s Real Plan had introduced the URV in March 1994 and, on July 1, R$1 became equivalent to one URV. On that first day, the U.S. dollar selling rate was R$1.00. On the last business day of July it was R$0.94; on August 31, R$0.889; and on September 30, R$0.853.[4][5] In other words, within a few months the real appreciated extraordinarily against the dollar.

For a company with financial assets in local currency and liabilities in U.S. dollars, that movement produced a substantial foreign-exchange gain. In the US GAAP reports prepared for the foreign shareholder, the cumulative financial effect over roughly three months was on the order of US$17 million, if memory serves.

It was an excellent result. But it did not result from a deliberate risk decision with pre-established limits. It resulted from an exposure that had not even been properly mapped.

When executives from the foreign shareholder came to Brazil to understand what had happened, the conclusion was clear: the company had made a great deal of money, but it could have lost just as much if the exchange rate had moved the other way. From that point on, the exposure began to be formally measured and a foreign-exchange hedging policy was introduced which, in that context, fully hedged the identified exposure.

It was my first major lesson in hedging. And perhaps the best possible description of the episode is a simple expression: more luck than judgment.

A positive outcome does not turn an unknown exposure into a good risk decision.

Hedging does not mean “zero risk”

In the years that followed, already as Treasurer of Latapack-Ball, I continued to deal with foreign exchange in an industrial environment. The company operated in Brazil, but an important part of its economics was linked to the

U.S. dollar: imported raw materials, foreign debt and commercial price-adjustment mechanisms. The question was no longer simply “do we have dollar debt?”, but rather what the net economic exposure was after considering revenues, costs, assets, liabilities and timing.

Later, at Cargill, I entered a much more sophisticated environment. In a global commodities company, foreign exchange, interest rates, credit, liquidity and commodity prices are part of the business every day. There I learned another important lesson: a sound risk policy does not necessarily need to eliminate every exposure.

Depending on the business, its capacity to absorb losses and the approved mandate, a treasury function may operate controlled long or short positions within clearly defined limits. What turns an open position into risk management rather than a bet is the combination of mandate, knowledge of the exposure, limits, governance, monitoring and the financial capacity to withstand adverse scenarios.

Years later, I was part of a team that revised and implemented a “Currency Exchange Risk Policy” for Cargill globally, approved by the Financial Risk Committee. The work received an internal CFO Award. In China, where I was responsible for Treasury for three years, the foreign-exchange and regulatory dynamics made that discipline even more tangible: risk had to be monitored almost continuously, and hedging or positioning decisions taken within policy generated material financial results.

As my career evolved, Risk Management came to mean far more than foreign exchange. I worked with credit and counterparty risk, interest rates, commodities, liquidity, insurance, fraud, operations, compliance, reputation and governance. At another stage, I also had global responsibility for corporate insurance programs. And the more varied the risks became, the more one conclusion kept repeating itself: the biggest problem is rarely the risk everyone can see. It is the risk below the surface.

The corporate iceberg

Financial and operating indicators reveal only part of a company’s exposure. The most dangerous portion is often hidden in processes, culture, incentives, undocumented decisions, dependence on key people, systems, supplier concentration, access permissions, compensation models or financial products that few people fully understand.

Corporate crises rarely appear fully formed overnight. They accumulate silently before becoming visible.

That is why mapping risks by category is only the beginning. Finance and liquidity; credit; foreign exchange and interest rates; commodities; tax and regulatory; operations and supply chain; legal; technology and cybersecurity; fraud; compliance; governance; people; reputation. The list changes with the business and is never truly complete.

More important is understanding the connections. An operational event can become a reputational problem. Fraud can turn into a liquidity crisis. A tax risk can affect covenants. A technology failure can interrupt billing. A seemingly small commercial decision can concentrate credit exposure in a single counterparty. Risk Management must look at the system, not only at the boxes on the organization chart.

ISO 31000 recommends identifying, analyzing, evaluating, treating, monitoring and communicating risks in a way that is integrated across the organization. The Institute of Internal Auditors’ “Three Lines” model also reinforces the distinction between those who own and manage risk in the business, those who support and monitor, and those who provide independent assurance.[1][6]

When a “hedge” stops being a hedge

Few Brazilian episodes illustrate the danger of failing to understand an exposure as clearly as the currency losses suffered by major companies in 2008.

Sadia and Aracruz Celulose were real, operating, sophisticated exporters. Both used foreign-exchange derivatives. The problem was not the use of derivatives itself - derivatives are fundamental risk-management instruments. The problem arose when leveraged structures increased exposure beyond what economically needed to be hedged.

At Sadia, the company later reported that financial expenses related to derivatives reached approximately R$2.5 billion in 2008. The CVM, Brazil’s securities regulator, opened proceedings to investigate the responsibilities of the CFO and members of the Board of Directors in relation to compliance with and monitoring of the financial policy and the derivatives transactions.[7][8]

At Aracruz, the 2008 Form 20-F reported consolidated derivative losses of approximately US$2.16 billion, with significant exposure to Sell Target Forward transactions and swaps with options. CVM documentation described issues involving breaches of limits under the Financial Policy approved by the Board and insufficient disclosure of the scale of the risks embedded in those structures.[9][10]

Products such as target forwards and structures known in the Brazilian market as “dual index” transactions could offer an apparently attractive rate while embedding options and leverage. In practice, the company could be selling protection to the bank, multiplying its short-dollar position if a specified level were breached. While the market moved in the expected direction, the cost looked lower and the financial result could appear clever. When the regime changed, the hidden risk surfaced all at once.[11]

In Sadia’s case, the derivative losses were part of a period of severe financial deterioration; in 2009, its shareholders approved the combination with Perdigão that resulted in BRF. It would be simplistic to say that derivatives alone “caused” the transaction. But it would be equally wrong to ignore how quickly a poorly dimensioned financial exposure can alter a company’s strategic options.[12]

> **The lesson is not “derivatives are dangerous”. The lesson is this: an instrument that nobody can understand and explain simply probably should not carry a material exposure on the balance sheet.**

Policy, limits and appetite: how much can the company afford to lose?

Risk Management becomes real when it stops being a presentation and starts answering uncomfortable questions.

What risk is the company willing to take to achieve its objectives? What is the maximum it can lose without jeopardizing liquidity, covenants or reputation? Who can authorize an exception? At what point must an exposure be escalated? What is the limit per counterparty? What happens if historical correlations disappear? Does something that looks like a hedge under normal conditions remain a hedge under stress?

This is where the concept of risk appetite comes in. The Board does not need to decide every hedge or every operating limit, but it must understand and approve the risk profile the company intends to carry. The OECD Principles of Corporate Governance place among the Board’s responsibilities the establishment of risk appetite and risk culture and the oversight of risk-management systems, integrating them with strategy.[3]

Management, in turn, must translate that appetite into policies, limits, accountabilities, indicators and escalation mechanisms. A foreign-exchange policy needs to say more than “the company should hedge”. It must define what constitutes exposure, which instruments are permitted, time horizons, counterparties, limits, exceptions, mark-to-market requirements and responsibilities. The same applies to credit, liquidity, commodities or any other relevant category.

And no policy replaces judgment. There are times when the right risk decision is not to hedge. Others when it is to hedge 100%. Others when protection should be phased in. The point is that the decision should be conscious and consistent with the company’s capacity.

From the risk map to governance

A Risk Management structure does not need to start out complex. In many companies, the first gain comes from something almost elementary: putting the right people in the same room and asking which events could truly destroy value.

A good risk map identifies critical risks, describes exposure and impact, assigns an owner and records the mitigation plan. Probability and impact help prioritize, but they should not create false precision. Some extremely low-probability risks deserve enormous attention precisely because they can threaten the continuity of the business.

Then it must be followed up. A known risk without an action plan remains an unmanaged risk. Problems that escalate before being reported, decisions without traceability, functions that do not communicate and excessive dependence on key people are often far more prosaic causes of value destruction than a sophisticated quantitative model.

An effective Risk Committee should turn the map into a routine: clear owners, plans, indicators, status updates, exceptions and alerts to management and the Board. In its first 90 days, it is more important to identify and prioritize the largest exposures than to build a perfect architecture. Interviewing key functions, defining owners, creating a simple executive dashboard and establishing escalation criteria usually produces far more value than dozens of pages of policies that nobody uses.

Transparency is also part of risk management. Banks, shareholders, customers, suppliers, auditors and employees observe not only the problem, but also the company's ability to recognize it, react and communicate what it is doing.

Monitored risk becomes a decision

After more than three decades dealing with risk across different companies, countries and roles, I do not see Risk Management as a function whose purpose is to say "no".

> **Its role is to enable the company to say "yes" while knowing exactly what it is saying yes to.**

Well-managed risk can create competitive advantage. A company that understands its liquidity capacity can invest when competitors pull back. A company that understands its credit risk can sell more without deteriorating its portfolio. A treasury team that understands exposure and limits can make hedging decisions with conviction. A Board that sees relevant risks early can choose among alternatives while alternatives still exist.

Resilient companies are not those that avoid every risk. They are those that identify risks early, understand the exposure, consciously choose what they want to carry, react quickly when the environment changes and govern better.

> **Ignored risk becomes a surprise.**
>
> **Monitored risk becomes a decision.**

References

[1] ISO, ISO 31000:2018 - Risk management - Guidelines. Guidelines for identifying, analyzing, evaluating, treating, monitoring and communicating risks and integrating risk management into governance and decision-making.
[2] COSO, Enterprise Risk Management - Integrating with Strategy and Performance, 2017. Framework integrating risk, strategy and performance.
[3] OECD, G20/OECD Principles of Corporate Governance 2023, section on Board responsibilities and oversight of risk management and risk appetite.
[4] Central Bank of Brazil, Plano Real. The URV was used between March and June 1994 and converted into R$1.00 on July 1, 1994.
[5] Central Bank of Brazil, Time Series Management System, historical exchange-rate series: R$1.0000/US$ on July 1, 1994; R$0.9400 on July 29; R$0.8890 on August 31; R$0.8530 on September 30.
[6] The Institute of Internal Auditors, The IIA's Three Lines Model. Model of complementary roles among risk ownership and management, support/monitoring functions and independent assurance.
[7] Sadia S.A., 2008 results filed with the SEC: financial expenses related to derivatives of approximately R$2.5 billion in 2008.
[8] Comissão de Valores Mobiliários (CVM), Administrative Sanctioning Proceeding No. 18/2008 - Sadia S.A. Proceeding addressing the responsibilities of the CFO and Board members in relation to compliance with and monitoring of financial policy and derivatives transactions.
[9] Aracruz Celulose S.A., 2008 Form 20-F filed with the SEC: consolidated derivative losses of approximately US$2.159 billion, including Sell Target Forward transactions and swaps with options.
[10] Comissão de Valores Mobiliários (CVM), Administrative Sanctioning Proceeding No. 16/2008 - Aracruz Celulose S.A. Proceeding documents address Sell Target Forward exposure, limits under the Financial Policy approved by the Board and disclosure of the related risks.
[11] Silva, B.A.O.; Pinese, H.P., "The International Financial Crisis (2008) and the Effect of Foreign-Exchange Derivatives: the Aracruz Celulose target forward transaction", RACEF/Fundace. [Original article in Portuguese.]
[12] BRF Brasil Foods S.A. / Sadia S.A., Material Fact and Form 20-F: in 2009 shareholders approved the business combination through which Sadia became a wholly owned subsidiary of BRF.