

Finance covers a broad range of activities from the raising and monitoring of capital investment and returns, to trading and optimising these holdings for a very wide range of asset classes. Very often these activities exist in a **contested and competitive space**, where one party's position is negotiated with opposing traders, who seek to maximise their own return. Although these activities do add value, they are often perceived to be a "zero sum game".

Accounting is a professional activity that allows wide groups of stakeholders to partake in joint risk sharing ventures, whilst respecting **common rights and values** especially for minority holdings. When correctly administered, accounting is viewed as increasing trust in institutions and mutual endeavours. This is important since optimal risk sharing suggests that investors should diversify and hold a small fraction of many assets in the economy.

The two activities are **complementary**; accounting aims to record and report past transactions whilst finance deals with expectations of the future. Building upon and **enhancing social structures** of the day, they have evolved over centuries from the invention of physical money systems to the technological innovations of non-physical payment methods today. A wider range of assets is now tracked with greater precision and frequency than ever before.

It has been convenient for **government** to embrace these activities, so as to tax them and also to fund state activities, most typically through the **Central Bank**. Within an economy, this bank has a special role for supporting the currency in a country, managing the (trade) balance of payments and funding government activities. Whilst many consider that the central bankers only have control over domestic money, this process is political with an understanding that monetary actions can have real consequences. Money may not be economically or morally neutral.

The financial system has always been concerned about the risks that its investments face, much effort goes into identifying and assessing how emerging **risk factors** will affect the prospects of companies and entities that are already traded or listed on stock exchanges. The result is that there are many advisers and analysts in the area and there are as many US investment funds as companies quoted on American exchanges. Each fund competes against others for higher returns, investment professionals compete for performance and reputation.

Until recently, so called "externalities" were ignored and the limits of fiduciary duty were drawn to existing assets; will some businesses suffer or will others profit from

future temperature rises? Thus the investment community increasingly demands metrics that measure these risk exposures.

However, Central Bankers have long inhabited a world where they collectively measure and manage risk within their own system. The groups who meet to discuss risk within their system have formed rules to regulate the behaviour of participants in order to stabilise their mutual or systemic risk. These groups are often viewed as a "club" and cynics may indicate that their own interests dominate those of society.

Now it is clear that climate change is a sufficiently large and present risk to the global economy, bankers are seeking to incorporate emissions metrics into their monitoring, not just because they want measures of the environment's risk on them, but because they understand that their **collective action is creating risk for the environment and their system.**

The new range of risk measures discussed in finance, cover environment, social and governance measures of investments. Some advisors are seeking to measure **how environmental changes will affect each firm** as global temperatures increase.

On the other hand many investors are seeking to determine **how individual investments impact the environment.** The cause and effect between environment and investment can go both ways and the two measures play different roles. A high risk factor of the environment on a firm might indicate that it is risky to hold, some investors may sell that firm for those reasons alone. Independently, some investments may not be vulnerable to the environment but may cause it to degrade.

The investment world has long been resilient to mixed and two way causality; analysts continually look for how their actions affect others and vice versa. It is highly likely that this approach will now extend to climate impact, at least the topic is now being taken seriously and has generated engagement.

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