



Agustín Carles, CFA
Head of Macroeconomics at Santander Asset Management

Assessing Economic cycles: A structured macroeconomic framework (part I)

Linking economic fundamentals to growth estimates for investing

Introduction

Identifying the current stage of the business cycle is vital for investors, shaping decisions on asset allocation, portfolio construction, and risk management. This article introduces a structured macroeconomic framework that assesses the current economic climate and predicts how it is likely to evolve over the coming quarters. In effect, it serves as a compass, offering a sense of direction for the economic cycle rather than simply a point forecast.

The framework forms the backbone of the macroeconomic and scenario-based approach used at Santander Asset Management, and in turn shapes key elements of our investment views, from growth and inflation forecasting to the development of capital market assumptions (CMAs), and from strategic asset allocation (SAA) to tactical asset allocation (TAA).

Analysis of main GDP components throughout the economic cycle

Understanding where an economy sits in the business cycle is central to economic forecasting and investment decisions. Our framework builds on a well-established strand of academic literature about how financial conditions and real-economy forces interact (Borio, 2012; Bernanke, Gertler & Gilchrist, 1999) and sets out a structured way of tracing first how underlying economic fundamentals feed through to the different components of GDP, and ultimately, to the aggregate level of output.

The aim is twofold: both to pinpoint the current phase of the cycle and to identify any forces causing a shift. The starting point is a breakdown of GDP into its main components and an assessment of their respective importance for medium-term growth. Both our internal analysis and external research (OECD, 2012) suggest that how closely individual components move with overall GDP often provides a clearer cyclical signal than their growth rates alone. Indeed, the balance between household spending, business investment, government activity, and trade determines how the economy responds when conditions change and where pressures are likely to emerge.

GDP components

Exports

Business
investmentResidential
investmentPrivate
consumptionPublic
spending

 Macroeconomic
outlook
(output layer)



In this regard, the composition of economic output differs markedly across countries. In the United States, business investment—spending on machinery, equipment, software, and intellectual property—represents a significant, though not dominant, component of economic activity. While it accounts for only around 10 per cent of GDP, it plays a disproportionate role in shaping the economic cycle. This reflects not only its major influence on employment, household income, and ultimately private consumption, but also its inherently volatile and cyclical nature. For this reason, business investment is often more informative than consumption itself (which represents roughly 70 per cent of GDP) in assessing the economic outlook. Residential and other forms of construction investment are less important than business investment because of their lower weight on GDP (around 6-7 per cent), and also because of their lower impact on employment.

In the Eurozone, in contrast, while business investment is important, the economic cycle can be relatively more sensitive to external demand, reflecting the region’s greater reliance on trade (European Commission, 2024; IMF, 2018). As a result, the acceleration or deceleration of net exports is more instrumental in determining swings in the eurozone’s economic cycle than they do in the United States.

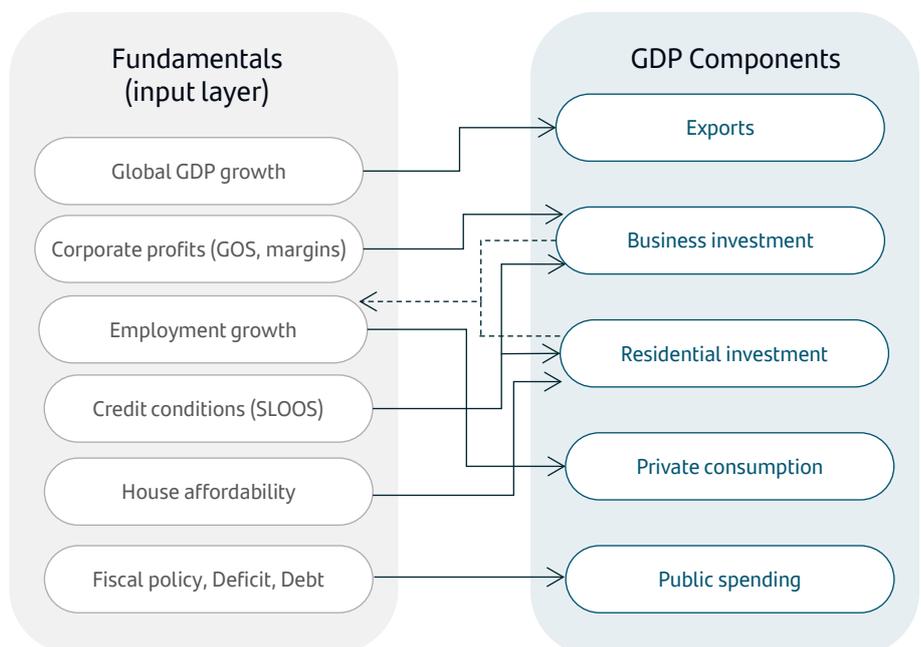
Finally, in China, in common with many emerging economies, investment has historically accounted for an unusually large share of activity, often exceeding 40 per cent. This is because China has been heavily building up its basic infrastructure, housing stock and industrial capacity. As a result, shifts in investment conditions or policy-directed funding tend to feed quickly into overall economic performance.

Identifying key fundamentals of the main GDP components

The next step in assessing where the economy stands in the business cycle is to identify the underlying forces that determine each component of GDP. Of course, the economic system is a web of decisions that all impact each other – household spending drives firms’ profits, which in turn affects hiring and investment, which then impacts household incomes and spending. However, our approach focuses on those fundamentals where these feedback effects are smaller. Therefore, the focus is on factors that help set the direction of activity rather than those that merely respond to short-term economic swings. In practice, no economic variable is entirely exogenous (that is, insulated from feedback effects), but some are more stable and informative than others. The framework therefore gives priority to influences that tend to move independently of the cycle itself.

In the United States, business investment is shaped above all by two such forces. The first is the availability of credit, which can be captured by measures such as the Federal Reserve’s Senior Loan Officer Opinion Survey (SLOOS) for companies (Lown & Morgan, 2006). The SLOOS reflects banks’ willingness to extend credit to non-financial corporations or the Federal Reserve’s Financial Conditions Impulse on Growth (FCI-G) index. Tighter credit conditions lead to weaker capital expenditure than otherwise, and in turn to softer growth.

The second force is corporate financial profits, which determines how willing and able firms are to increase investment. Measures such as Gross Operating Surplus and the financing gap, as well as their individual drivers, such as employee compensation, gross value added, tax, interest payments,... (BEA, 2019; Board of Governors of the Federal Reserve System, 2026) all help build a picture of firms’ financial health.





Similarly, residential investment depends on a different set of fundamentals, such as mortgage lenders' lending standards, housing affordability and household financial strength. Research has shown that credit supply shocks exert powerful effects on housing cycles and aggregate activity (Justiniano, Primiceri & Tambalotti, 2015; Mian & Sufi, 2018).

Finally, when it comes to structures investment, it is important to distinguish between energy-related infrastructure which depends heavily on energy prices, and spending on other structures – which includes everything from data centres to factories to new office space – where bank lending standards are more important. Finally, government policy may also have a huge impact, as we have recently seen with the US CHIPS Act, which encouraged a boom in the construction of new factories to build and develop semiconductors.

Once the key drivers of each investment component have been assessed, the next step is to form a view on aggregate fixed investment. This variable is a critical determinant of employment growth—particularly in more cyclical sectors such as manufacturing and private services other than healthcare—and is therefore treated as endogenous within our model. Beyond investment, the employment outlook is also influenced by exogenous forces, notably migration.

In our framework, employment is the main driver of private consumption. Employment, in turn, provides the main anchor for assessing household' financial position. That said, other factors, including access to consumer credit, saving behaviour, and whether households are net borrowers or lenders, are also important.

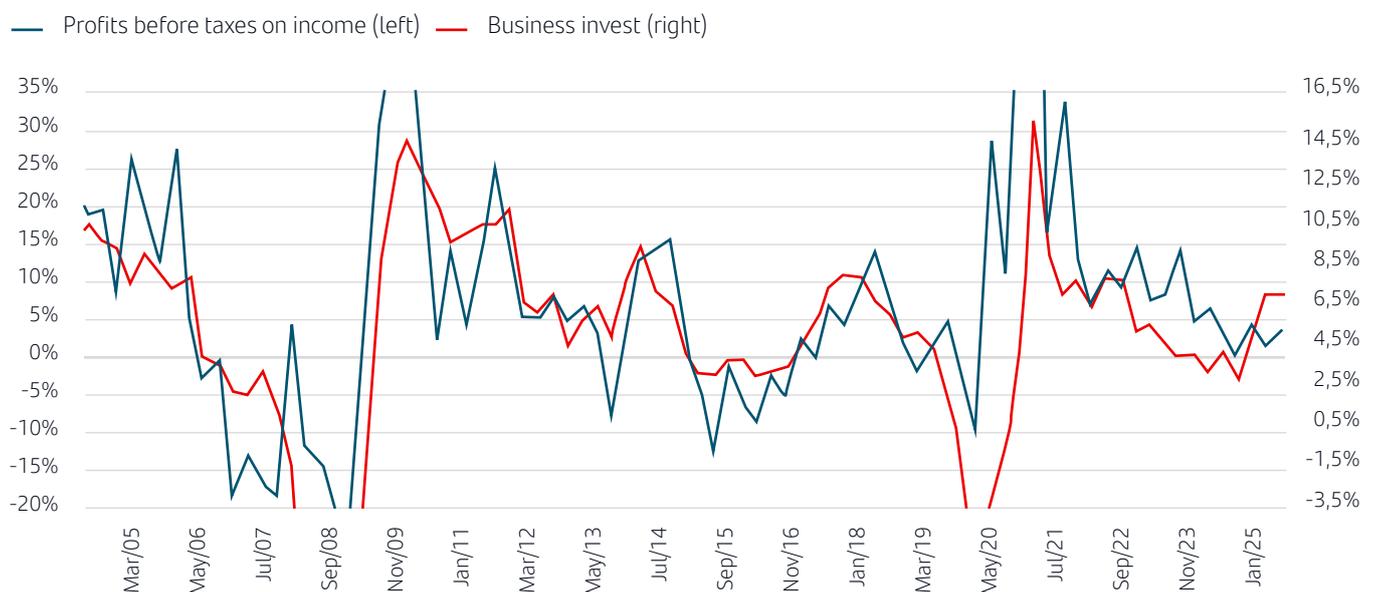
For the remaining components of GDP—most notably exports and public spending—we focus on global economic growth (while acknowledging that this variable is not fully exogenous) and trade policy for exports and the stance of fiscal policy for public spending. Although these components aren't usually as important for the growth outlook as investment or consumer spending, major shifts in policy such as last year's hike in US tariffs and the tax cuts in the One Big Beautiful Bill can have a huge impact.

A glance at the current state and outlook of fundamentals

Once the key forces shaping each GDP component have been identified, the next step is to assess where they stand today and how they are likely to evolve over the medium term. Rising corporate profits, for example, foreshadow faster growth in business investment, while tighter bank lending standards presage a slowdown. Currently, stable profitability and ample liquidity suggest that US business investment will continue expanding at a moderate pace.

US business investment and non-financial corporates profits yoy growth

Source: LSGE

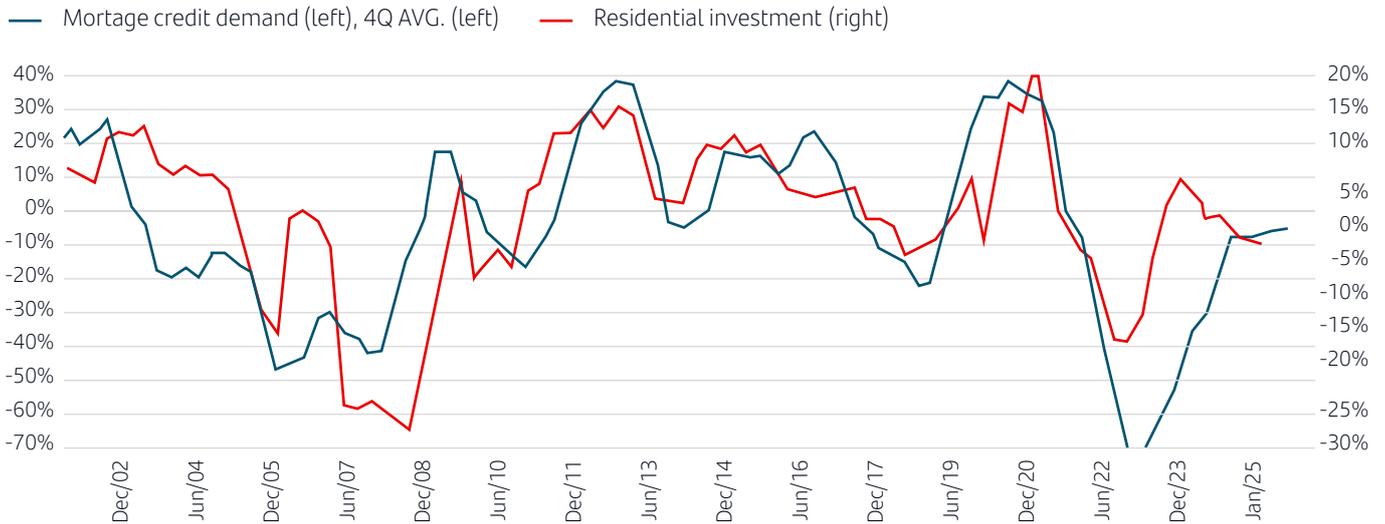




At the same time, the Federal Reserve's SLOOS suggests mortgage credit is tight for both households and commercial borrowers, indicating that residential and structures investment will remain subdued.

US Residential investment and mortgage credit conditions according to Senior Loan Officer Opinion Survey

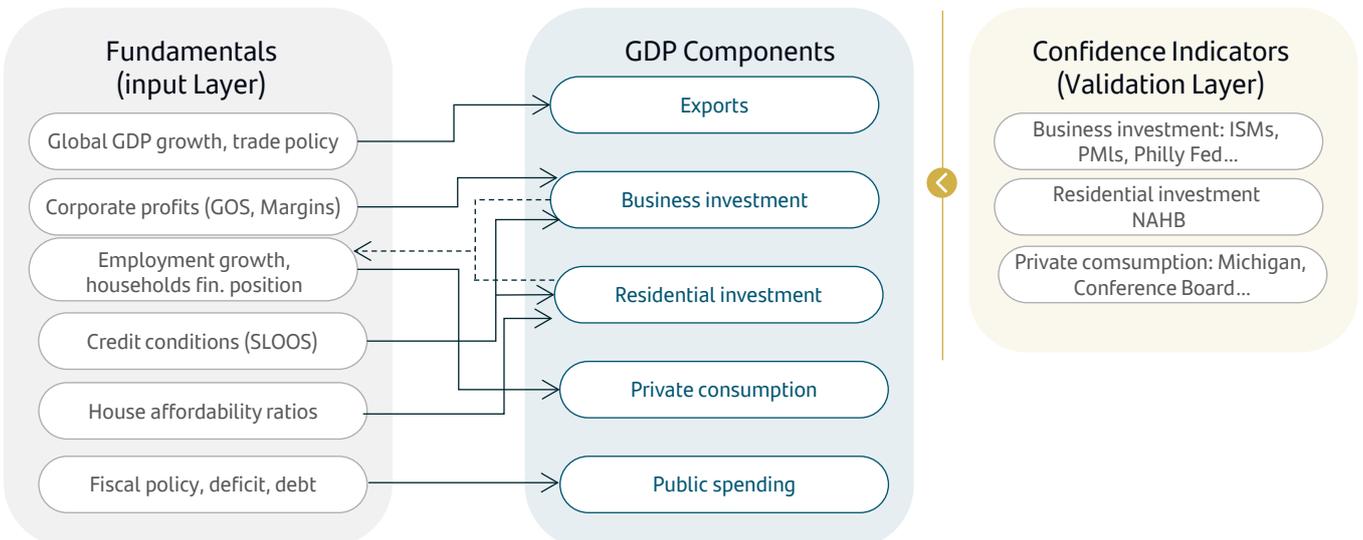
Source: LSGE, SAM calculations



Cross-validation through high-frequency indicators

Once the main economic drivers have been assessed, they are checked for consistency against more timely and higher frequency indicators, such as business and consumer confidence surveys and SAM's proprietary nowcasting tools. In the United States, the ISM surveys are a useful snapshot of business sentiment, while confidence measures from homebuilders offer an early read on housing activity. Consumer confidence surveys are used as a further check on the outlook for household spending.

Where short-term indicators diverge from fundamental conditions, we prioritise understanding the underlying causes of this divergence. By monitoring both fundamentals and sentiment measures over time, we allow the decision framework to be guided by their eventual alignment rather than short-term noise, while recognising that underlying fundamentals tend to provide a more stable and reliable anchor for medium-term outcomes. This approach is consistent with evidence showing that confidence measures are effective at capturing short-term fluctuations in activity and are especially informative for near-term assessment and nowcasting, with the strongest incremental value typically at short horizons (months to a few quarters) (ECB, 2008).



Conclusions

Our framework identifies and evaluates both the current situation and projected medium-term trends of the core exogenous fundamentals driving each major GDP component. Next, the framework checks for consistency between these fundamentals and high-frequency indicators for each GDP component. Once this is done, we generate forecasts for these components and combine them to form the overall GDP outlook. This aggregation process is not simply a mechanical sum; instead, it is informed by the importance of each key component to determine the current phase of the economic cycle. Therefore, the aggregation process varies between countries due to differences in the importance of their GDP components.

By blending detailed, bottom-up GDP forecasts with broader, top-down cycle analysis, our framework ensures alignment between component-level signals and the aggregate economic picture. This method reduces the risk of overreacting to short-term data fluctuations and improves the reliability of medium-term forecasts.

For Santander Asset Management, this framework provides a disciplined bridge between macroeconomic analysis and investment decisions. By systematically linking economic fundamentals to GDP dynamics and cycle positioning, it strengthens the consistency of our growth forecasts, capital market assumptions, and both strategic and tactical asset allocation. In doing so, it enhances the robustness and repeatability of our investment process.

References

Bernanke, B., Gertler, M., & Gilchrist, S. (1999). The financial accelerator in a quantitative business cycle framework. *Handbook of Macroeconomics*.

Board of Governors of the Federal Reserve System. (2026). *Financial Accounts of the United States (Z.1)*.

Borio, C. (2012). The financial cycle and macroeconomics: What have we learnt? *BIS Working Papers*.

European Commission (DG ECFIN). (2024). Euro area competitiveness: trade performance and risks of trade fragmentation (Note to the Eurogroup). <https://www.consilium.europa.eu/media/10ha5vtu/com-note-for-eurogroup-ea-competitiveness-trade-performance-and-risks-of-fragmentation.pdf>

European Central Bank (ECB). (2008). Short-term forecasts of euro area GDP growth. *ECB Working Paper No. 949*. <https://www.econstor.eu/bitstream/10419/153383/1/ecbwp0949.pdf>

International Monetary Fund (IMF). (2018). Trade Uncertainty and Investment in the Euro Area. *IMF Working Paper WP/18/281*. <https://www.imf.org/-/media/files/publications/wp/2018/wp18281.pdf>

Justiniano, A., Primiceri, G. & Tambalotti, A. (2015). Credit supply and the housing boom. *Journal of Political Economy*.

Lown, C., & Morgan, D. (2006). The credit cycle and the business cycle: New findings using the SLOOS. *Journal of Money, Credit and Banking*.

Mian, A. & Sufi, A. (2018). Finance and business cycles: The credit-driven household demand channel. *Journal of Economic Perspectives*.

OECD. (2012). *OECD System of Composite Leading Indicators*.

U.S. Bureau of Economic Analysis (BEA). (2019). *NIPA Handbook of Concepts and Methods: Glossary*.

Important Legal Notice

This report has been prepared by Santander Asset Management (hereinafter "SAM"). SAM is the functional name of the asset management business conducted by the legal entity SAM Investment Holdings S.L. and its branches, subsidiaries and representative offices.

This document contains economic forecasts and information gathered from several sources. The information contained in this document may have also been gathered from third parties. All these sources are believed to be reliable, although the accuracy, completeness or update of this information is not guaranteed, either implicitly or explicitly, and is subject to change without notice. Any opinions included in this document may not be considered as irrefutable and could differ or be, in any way, inconsistent or contrary to opinions expressed, either verbally or in writing, advices, or investment decisions taken by other areas of SAM.

This report is not intended to be and should not be construed in relation to a specific investment objective. This report is published solely for informational purposes. This report does not constitute an investment advice, an offer or solicitation to purchase or sell assets, services, financial contracts or other type of contracts, or other investment products of any type (collectively, the "Financial Assets"), and should not be relied upon as the sole basis for evaluating or assessing Financial Assets. Likewise, the distribution of this report to a client, or to a third party, should not be regarded as a provision or an offer of investment advisory services.

SAM makes no warranty in connection with any market forecasts or opinions, or with the Financial Assets mentioned in this report, including with regard to their current or future performance. The past or present performance of any markets or Financial Assets may not be an indicator of such markets or Financial Assets future performance. The Financial Assets described in this report may not be eligible for sale or distribution in certain jurisdictions or to certain categories or types of investors.

Except as otherwise expressly provided for in the legal documents of a specific Financial Assets, the Investment Products are not, and will not be, insured or guaranteed by any governmental entity, including the Federal Deposit Insurance Corporation. They are not an obligation of, or guaranteed by, Santander, and may be subject to investment risks including, but not limited to, market and currency exchange risks, credit risk, issuer and counterparty risk, liquidity risk, and possible loss of the principal invested. In connection with the Financial Advisors, investors are recommended to consult their financial, legal, tax and other advisers as such investors deem necessary to determine whether the Financial Assets are suitable based on such investors particular circumstances and financial situation. Santander, their respective directors, officers, attorneys, employees or agents assume no liability of any type for any loss or damage relating to or arising out of the use or reliance of all or any part of this report.

Past performance does not predict future returns. The returns may increase or decrease as a result of currency fluctuations relative to the respective investors' domestic currency. Any reference to taxation should be understood as depending on the personal circumstances of each investor and which may change in the future. Costs incurred for purchasing, holding or selling Financial Assets may reduce returns and are not reflected in this report.

This report may not be reproduced in whole or in part, or further distributed, published or referred to in any manner whatsoever to any person, nor may the information or opinions contained therein be referred to without, in each case, the prior written consent of SAM.

Any third-party material (including logos, and trademarks), whether literary (articles/ studies/ reports, etc. or excerpts thereof) or artistic (photos/graphs/drawings, etc.), included in this report is registered in the name of its respective owner and only reproduced in accordance with honest industry and commercial practices.