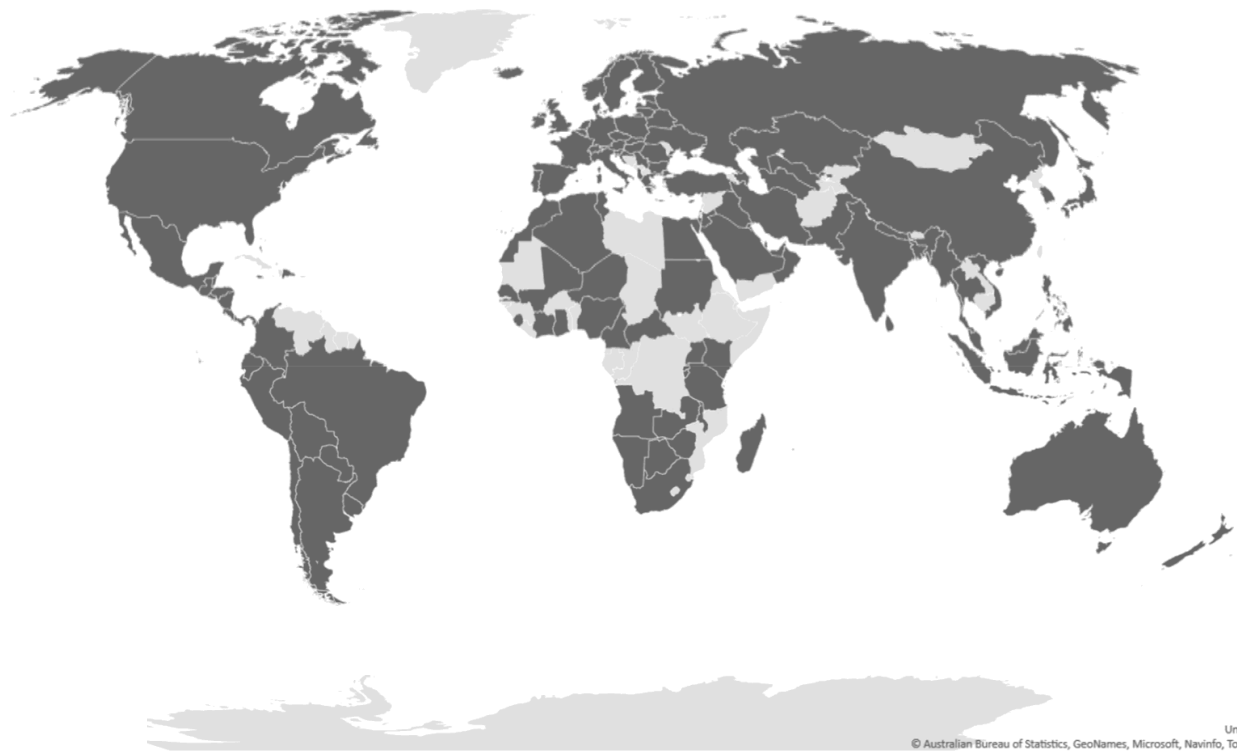


Factsheet

View® global economic model

Prognos' global simulation model





View info box

In VIEW, Prognos has a global forecasting and simulation model that covers 125 countries and thus about 98 % of the current global economic output. VIEW enables a detailed and consistent representation of the future development of the global economy. In VIEW, interactions between countries and industries are explicitly captured and modelled. With VIEW, it is possible not only to show how a shock in one country affects the other countries modelled in VIEW, but also what consequences their reaction has for the country that triggered the shock. The analytical significance of the model therefore goes beyond that of country models with predefined global economic parameters. VIEW works on the basis of annual data. The possible simulation period currently extends into the year 2060.

Based on central, exogenously set parameters, such as demographics, the development of energy prices, or the targets for fiscal and monetary policy, VIEW is used to generate forecasts for the global economy and individual countries. In addition, VIEW makes it possible to create a wide range of scenarios in which, for example, alternative historical or future developments in a country or industry, and their consequences, can be determined in detail.

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Structure of the model

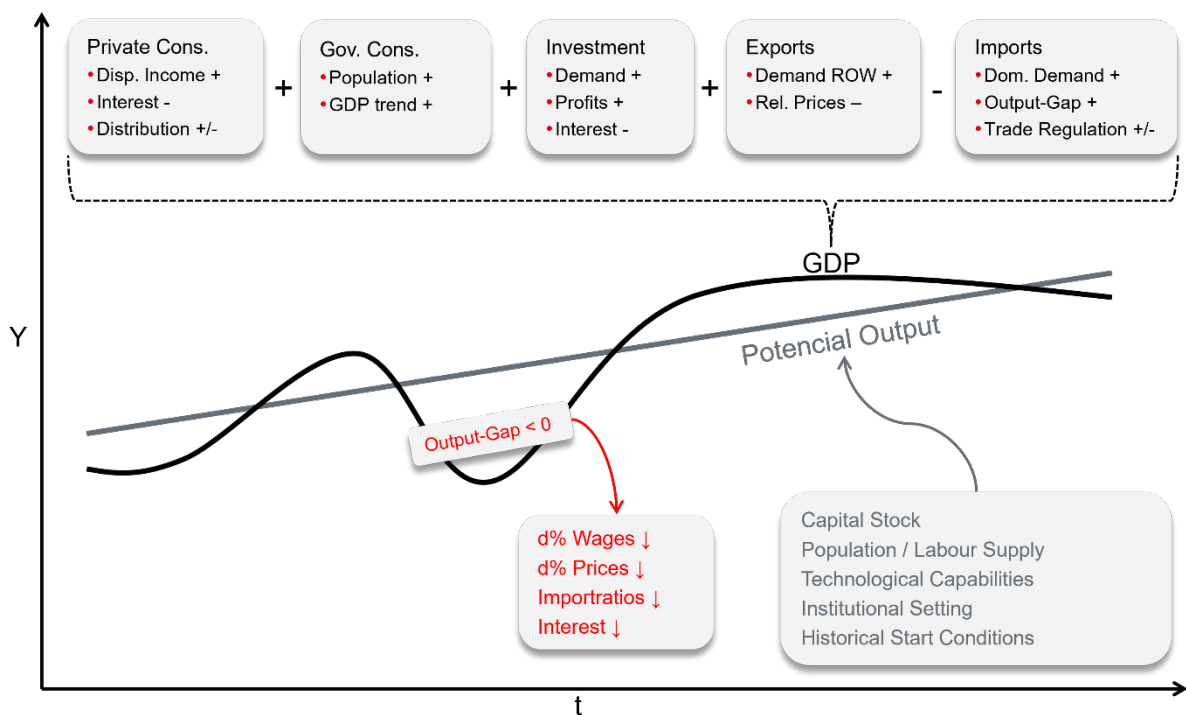
VIEW consists of individual country models. These can be divided into two groups: the models for the 37 leading industrial and emerging countries (including the countries of the European Union, the United Kingdom, Canada, the USA, Japan, Brazil, China, and India) are all structured in the same way. They comprise approximately 600 demographic and macroeconomic variables as well as a large number of foreign trade and sector-specific variables (trade and value-added structure, import demand from other countries, price, and wage ratios, etc.). The models of the remaining countries show comparable functional forms but are considerably less precise in terms of the variable scope due to the poorer data situation. As far as the available statistics allow, VIEW incorporates country-specific input-output tables, with the help of which value added and employment are determined, differentiated according to economic sectors.

In the interactive solution variant, the country models exchange information (import demand, interest rate, price, wage levels etc.) with each other until a stable solution has been found for all variables in all country models. For issues where external economic implications are not the focus, a single country model can be considered in isolation from the other country models with predefined global economic parameters.

Functional correlations

VIEW is an empirically based structural equation model. While in the short term potential output is roughly given and effective demand determines current output, in the medium- and longer-term supply-side factors drive the output and the overall economic growth dynamic.

Figure 1: Functional correlations (simplified)



Source: Own presentation

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The development of a country's current output is driven by spending decisions in the four sectors – private households, businesses, government, and the rest of the world. If the resulting output is above the level that can be achieved with the normal utilization of production capacities, wage and price dynamics accelerate, interest rates go up, and import quotas rise. These effects lead to a dampening of effective demand and a (gradual) return of current output to its trend level. In the event of an underutilization (i.e., the output gap is less than zero) corresponding reverse effects occur.

The potential growth of a country is not exogenously specified but is calculated in the model also in terms of its dependence on current economic development. For example, weak effective demand dampens investment and capital stock growth, and the structural component of unemployment increases during a downturn. The institutional framework of a country is used in the form of regulatory indices to influence potential growth. The monetary and fiscal policy of a country is determined using rule-based model endogenous variables.

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