

SOCIO-ECONOMIC FOOTPRINT

We conducted our 1st socio-economic study to measure Sanofi's footprint, both globally and locally.

G4 indicators : G4-EC1, G4-EC8

Our economic impacts go far beyond those of our own activities: reaching various business sectors, households and public institutions all over the world.

To better understand our contributions across the world, we decided to estimate our value creation across our supply chain, households and public institutions in countries where we operate.

The scope comprised 2014 data from 25 countries selected for their importance in total purchase and sales, their number of employees and local specificities (distribution centers, manufacturing and R&D sites).

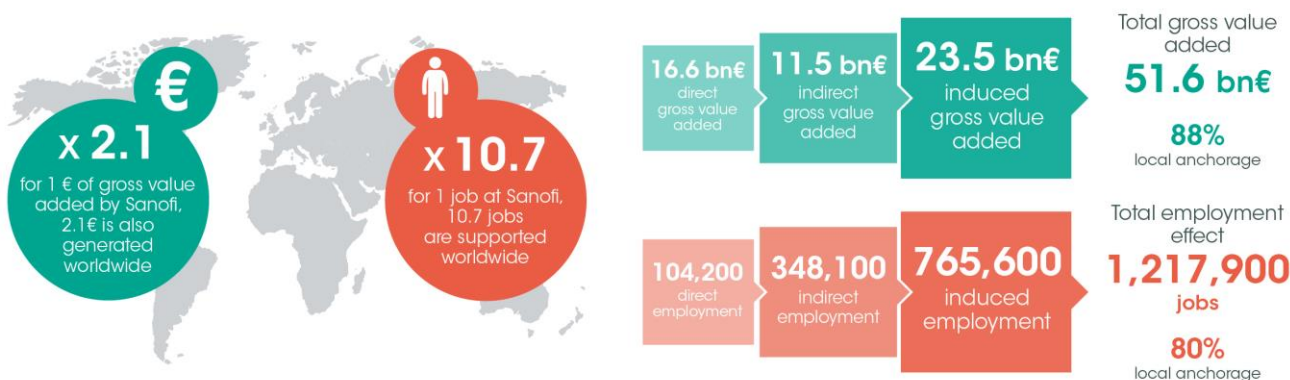
In 2014, the selected countries represented around 90% of the Company total purchase, 83% of turnover, approximately 80% of the Group's Value Added (GVA), and 95% of jobs.

Globally, the study concludes that Sanofi supports **around 1,2 million jobs annually and generates around 51,6bn€ of GVA worldwide** thanks to its direct, indirect and induced economic effects. The most impacted industries being Corporate and Financial services, Chemical products industry and Education and Public Health services.

THE SOCIO-ECONOMIC FOOTPRINT OF SANOFI WORLDWIDE

Sanofi's socio-economic footprint goes far beyond the direct impacts generated by its economic activity. It includes the indirect impacts, generated along the value chain, and induced effects, related to domestic consumption and government spending.

In total Sanofi supports **1,217,900 jobs** and generates around **51.6 bn€** of Gross Value Added worldwide



TOP 5 MAIN SECTORS IMPACTED WORLDWIDE (TOTAL: 1,217,900 JOBS)



Source: 2014 Data from Sanofi; Utopies calculation (LOCAL FOOTPRINT®)

I. METHODOLOGY

LOCAL FOOTPRINT® is a pioneer methodology based on input-output tables tracing all economic exchanges between countries. The first works on tables aiming to represent the economic relationships between activity branches were launched by Wassily Leontieff, 1973 Nobel Prize in Economics.

For the purpose of this study, an independent French consulting agency, recognized for its expertise in sustainability and socioeconomic footprint studies exploited and adjusted the Eora database for which it has exclusivity. Result of an Australian large-scale research project building the first global input-output table offering quality standards and regular updates, the Eora database combines international trade data specialized by economic activity and localized by country. Sourced and aggregated by UN statistics organizations (Comtrade and UNData), this data is best in class representing national economic accounts at the global level.

EORA statistic tables are available for 186 countries. This project is financed by the Australian Research Council (ARC) and was developed by Lenzen M, Kanemoto K; Moran D, and Geschke A (2014).

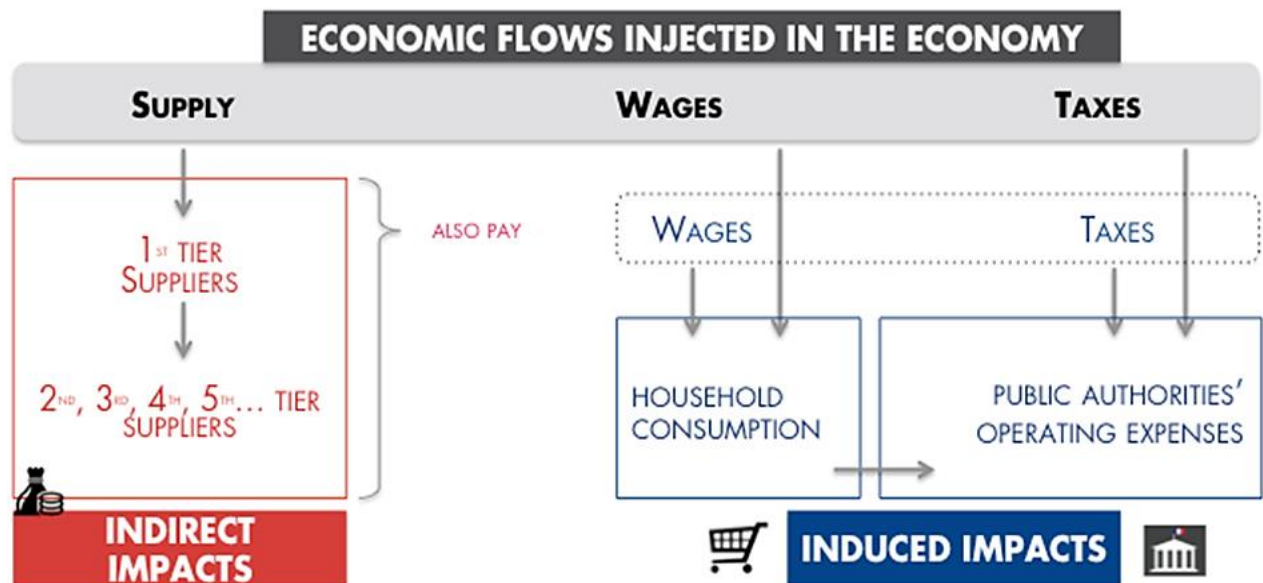
Based on qualified spendings, human resources and finance data provided by the Company, every euro we spent either for purchase, remuneration of employees or taxes and its repercussions along our supply chain are traced through the different economic activity branches worldwide.

The different types of impacts captured and measured can be defined as follows:

- Direct impacts: are Sanofi's own impacts – our jobs and the added value generated by our activities.
- Indirect impacts: full time year jobs and GDP (economic value) supported within our supply chain and service providers – 1st tier suppliers, as well as 2nd, 3rd, 4th, etc. tier suppliers.
- Induced impacts: are the impacts supported by household consumption (wages paid by Sanofi and its chain of suppliers) and by public administration expenditure (taxes paid by the Company and its chain of suppliers).

For more information see a very detailed presentation of the EORA database and of the construction of the methodology are available in the following articles:

- Lenzen, M., Kanemoto, K., Moran, D., Geschke, A. *Mapping the Structure of the World Economy* (2012). *Env. Sci. Tech.* 46(15) pp 8374-8381. DOI:10.1021/es300171x
- Lenzen, M., Moran, D., Kanemoto, K., Geschke, A. (2013) *Building Eora: A Global Multi-regional Input-Output Database at High Country and Sector Resolution*, *Economic Systems Research*, 25:1, 20-49, DOI:10.1080/09535314.2013.769 938



The footprint adds Sanofi's direct impacts (value added) to the indirect impacts generated by its supply chain. Wages and taxes create induced impacts (activities supported by household consumption and public administration expenditures).

II. LIMITS OF THE MODEL

A rigorous economic impact analysis requires a good knowledge of the functioning of the model used, but also a capacity to interpret the results while taking into account the limits and the hypotheses of the model used:

- Results are estimates and correspond to a gross economic weight, not taking into account potential cannibalizations on other economic actors.
- The reliability of results depends on the reliability of data in the input/output tables (source EORA), tables that besides are an accounting representation of economic interactions for a given year.
- The model does not take into account the notion of time. It is a static representation of the economy at a given time, following a spending “shock”.
- The production function of a given activity sector is fixed and there are no economies of scale.
- The model does not take into account the phenomenon of resource scarcity.
- LOCAL FOOTPRINT ® is a linear model. All things being equal, a shock of 10M\$ in a productive sector is equal to 10 shocks of 1M\$ in the same sector.
- Catalytic impacts potentially resulting from the Company’s activities (impacts on population’s health) are not taken into account.

III. GLOSSARY

Gross Value Added or Contribution to GDP

The gross value added describes a company's contribution to the gross domestic product (GDP). The gross value added is the key figure for measuring a country's economic performance and its prospective of growth and economic welfare. Sanofi's value added corresponds to the difference between the turnover of the Company and the intermediary consumption.

Local anchorage

The notion of “local anchorage” of an activity in a given country is defined as the following impact ratio: LOCAL ANCHORAGE = Impacts generated in the relevant geographical area by the activity / Total impacts generated by the activity worldwide.

The model used to calculate the global footprint makes it possible to determine not only the indirect and induced impacts of Sanofi, but also to establish the location of those impacts.

Multiplier effect

The multiplier effect from Sanofi business operations is the ratio from the direct impact of the company's business activities (head offices, subsidiary, manufacturing, distribution centers, etc) to indirect supply chain impacts and induced impacts generated by household and public-sector spending.

Multiplier restated

If Sanofi multiplier effect equals $(X+1)$, it means that one job directly created by Sanofi supports X additional jobs. X corresponds to the multiplier restated.