OPENECONOMICS

ICIO Model
Inter-Country Input-Output,
OECD

FIFA WORLD CUP 2026™
IMPACT ANALYSIS
&
SOCIAL RETURN ON INVESTMENT

TECHNICAL REPORT

02/04/2025

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1 INTRODUCTION

The purpose of this document is to outline a detailed methodological procedure for the use of the ICIO model for the socio-economic ex-ante impact assessment of the FIFA World Cup 2026™ held in Canada, Mexico and the United States. The aim is to provide a clear and systematic roadmap covering all stages of the use of the model, from the initial collection of input data for impact assessments to ex-post robustness checks.

2 LITERATURE REVIEW

The literature on the economic evaluation of the FIFA World Cup™ (FWC) has mostly aimed at demonstrating a significant link between the event and economic growth and social benefits.

Coates' 2013 econometric approach analyzes the FIFA Women's World Cup™ (FWWC) by comparing it to events such as the Winter Olympic Games and the Men's FWC to assess its economic impact. Although his study focuses on the FWWC, its methodology is relevant to evaluating the effects of hosting the FWC. His results show that hosting events such as FIFA World Cup™ (FWC) has no impact on the rate of economic growth. This approach links the evaluation of the FWC to a large body of economic analysis on sport mega-events, encompassing the Men's FWC and the Olympics.

On the other hand, a parallel strand of the literature aims at estimating economic impacts through simulation analysis, employing families of models such as Input-Output (IO) tables and Computable General Equilibrium models. Such tools allow for a more detailed quantification of the effects in terms of sectors and countries, offering a wide perspective on all the spill-over benefits attributable to an event. A large share of this kind of economic analysis on sport mega events encompasses the Men's FWC and the Olympics.

Lee et al. (2010) use a CGE model to compare the beneficial effects of the Korea-Japan 2002 FWC to the negative ones related to the 9/11 attack. Their results suggest that hosting the World Cup had a positive impact on the economy, but the positive impact was smaller than the negative impact of the 9/11 attacks.

Using an input-output approach, Lee and Taylor (2005) estimate the impact of the Korea-Japan 2002 FWC tourist attraction. Making use of survey data, they are to isolate FWC-related tourist demand stimuli from the general tourist expansion. They found that the World Cup generated an economic impact of US $1.35 billion of output (sales), US $ 307 million of income and US $ 713 million of in terms of GDP for South Korea. The results also showed that foreign World Cup tourists provided a much higher yield compared with foreign leisure tourists, spending an estimated 1.8 times as much.

Mabugu et al. (2008) performed an ex-ante evaluation of the 2010 FWC in South Africa using SAM (Social Accounting Matrix) multipliers. They found that hosting the event has a positive impact on gross domestic product and imports. This technique can be seen as an extension of an I-O analysis, which incorporates full endogenous effects of consumption, income distribution, and savings. Regarding the 2010 FWC, Bohlmann and VanHeerden (2008) used a 32-sector Computable General Equilibrium (CGE) model to study the impact of the shocks in infrastructure developments, increased tourism and financing onto the local economy. Overall, the real economic impact was

found to be negligible given the relatively short time period under consideration. Industries such as construction, transport, and accommodation naturally benefited from the event.

Also, Cost-Benefit Analysis has been employed to evaluate the South African FWC (Menezes 2010), but despite the advantages of the CBA approach in terms of flexibility regarding potential economic benefits and/or costs to evaluate, such method does not include any consideration of intersectoral economic relations or spillover effects (which are not negligible in the case of FWC events). A further study on FWC can be found in Domingues et al. (2011), in which a CGE model was used to simulate the national impact of the 2014 FWC in Brazil. They predicted an average growth of 1.2% in the GDP of the host cities and the creation of the equivalent of 158 thousand jobs. Analysis of the results indicates, however, that the positive impact of these investments depends on private financing capacity and on the reallocation of public spending: considering opportunity costs, they tend to be higher with public financing, leading to a lower economic impact.

Lastly, Daniels and Norman (2003) produced estimates of seven sport tourism events in South Carolina through IMPLAN 2.0, a modelling platform based on multi-regional Input-Output analysis. The extent of the indirect and induced impact tends to be lower compared to the direct one with respect to our findings; this might be because the extent of "exogenous" geographies might be different, since the 2026 FWC analysis consider all global value chains, while Daniels and Norman's analysis is more US-centered. This influences the size of indirect and induced multipliers. Also, looking at host country only, the proportion of direct, indirect and induced effect tends to be much more similar to the ones in the IMPLAN analysis.

The later kind of analysis is the closest to the approach followed in the 2026 FWC impact assessment conducted by OpenEconomics, in which a multi-country input-output matrix has been employed. The key message from the literature is that for the analysis of events like the FWC, or more in general for the assessment of mega-events, a combination of approaches is desirable: while simulation analyses are useful to get a complete and detailed set of information about potential direct and spill-over impacts of the event, econometrics remarks the significance of the relationship between economic growth and the event occurrence.

3 INPUT DATA

The primary data sources beyond the economic flows of the ICIO include FIFA, local government investments in the event, and tourist spending. These investments generate a local demand shock, primarily impacting on the hosting economies.

Given the heterogenous classification of expenditure items, for the purpose of the analysis all expenditures have been associated to one or more sectors included in the ICIO disaggregation.

FWC demand shock refers to:

- Expenditures on event preparations, including investments made prior to 2026.
- Spending on goods and services utilized during or immediately around the event.

The following tables show the full detail on FIFA expenditure estimates in both periods:

Figure 1: Pre-event expenses data.

Pre-event expenses (CAPEX) (Mln USD):	2017-2024	2025	2026
Stadium building/restructuring services	-	-	-
Machinery and equipment	-	-	-
Transportation Vehicles	-	-	-
Energy and electricity	-	-	-
Business services expenses of which:			
Finance & Insurances	4,7	10,8	17,1
Legal	15,5	2,3	2,7
Administrative	2,6	1,5	3,8
Architectural/engeneering	8,7	48,0	7,0
ICT	6,8	31,2	-
Sustainability	0,8	3,9	4,8
Tournament Promotion & Communications	15,3	11,8	12,3
Workforce & Volunteers	75,3	102,8	61,7
Office Rental and Management	2,4	8,7	7,6
Wharehousing expenses	0,0	17,0	-
Travel & Accommodation Expenses	22,2	32,1	21,2
Ticketing Operations	0,2	14,1	-
Team Preparation Costs	-	-	96,0
Refereeing	0,0	0,0	-
TV Operations	26,7	10,2	-
Stadium and Training sites rental and operations	2,0	66,2	-
Draw, Ceremonies & Match Entertainment	17,5	19,7	2,4
Football Operations & Technology	19,7	19,0	0,3

Source: FIFA

Figure 2: Event Expenses data.

Event Expenses (MIn USD):	2026
Prize Money, Club Benefit Program, Legacy	1.016
Contingency	251
Energy and electricity	80
Stadium temporary infrastructure	68
Wharehousing expenses	28
Transportation Services	144
Workforce & Volunteers	178
Catering costs	23
Travel & Accommodation Expenses	50
Medical and Anti-Doping	10
Ticketing Operations	28
Refereeing	22
Guest Management	59
TV Operations	285
Safety & Security	144
Team Accommodation & International Flights	60
Stadium and Training sites rental and operations	190
Draw, Ceremonies & Match Entertainment	58
Tournament Promotion & Communications	56
ICT	111
Football Operations & Technology	38

Source: FIFA

In addition to FIFA's direct spending, the analysis includes direct government investments such as host cities and federal operational expenditures as well as capital investments. These account for a total of USD 2.7 billion.

The forecast of tourist spending is also factored in, calculated using assumptions about length of stay and daily expenditures.

Total stadium attendance is estimated at 6.52 million, based on FIFA data reflecting 90% of stadiums' full capacity.

Assuming that 40% of this attendance comprises foreign tourists, with an additional 10% as companions, we estimate that each tourist attends an average of two matches. From these figures, the total number of foreign tourists is projected to be approximately 1.5 million.

To calculate total tourist expenditure, this estimated number of tourists (1.5 million) is multiplied by an average daily spending of $500 per tourist and an average stay of 10 days. This reflects a realistic estimate of spending patterns and duration for an event of this scale in the USA.

4 TECHNICAL DESCRIPTION OF THE IMPACT ANALYSIS

4.1 Model features and limitations

This analysis uses the Inter-Country Input-Output (ICIO) Table as a multi-country and multi-sector macroeconomic model, in which the event is modelled as a demand shock of goods and services. While input-output analysis is a powerful tool for mapping the interconnectedness between economies and industries as well as estimating the flow of economic activity, it is important to understand both what this analysis achieves and its inherent limitations:

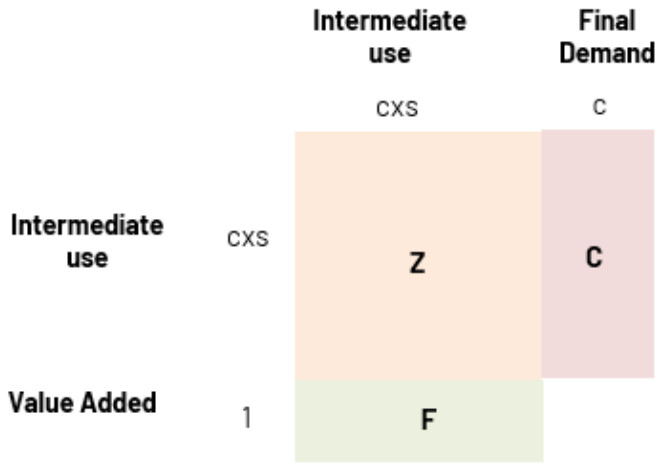
1. An Input-output analysis assumes linear relationships between economies and sectors via constant coefficients, implying proportional responses to changes in demand.
2. The analysis treats the demand generated by the FIFA World Cup™ as exogenous, focusing on the subsequent economic activity it stimulates. This approach does not account for the displacement of existing economic activity (where spending on World Cup-related activities substitutes for other expenditures) or the full spectrum of opportunity costs (the economic value of alternatives foregone by hosting and investing in the event).
3. The input-output model does not account for changes in prices resulting from increased demand.
4. The report focuses on the short- to medium-term impacts of the World Cup on economic activity and does not fully address long-term effects, including potential benefits from improved infrastructure or increased international visibility.

4.2 The OECD's ICIO Basic Structure

The Inter-Country Input-Output table represents the structure of the worldwide economy and highlights the circularity of relationships within it. In particular, the economic system described by the matrix can be summarized in the following fundamental blocks:

- Production sectors (Z),
- Value Added (F),
- Final Demand (C).

Figure 3: ICIO basic structure.



Source: OpenEconomics elaboration on OECD documentation

As illustrated in Figure 3, the base configuration of the ICIO Table, as sourced from the OECD, includes such elements in the standard I-O setting.

Within this framework, the index "c" denotes the count of countries, totaling 77, including the Rest of the World (ROW), in which are incorporated all the countries not explicitly represented in the matrix. Similarly, the index "s" indicates the number of sectors, amounting to 45. Each component of this matrix is amenable to further subdivision, with the granularity of disaggregation being contingent upon the specific objectives of the analysis and the data at disposal.

The tables in the appendix show the sector-specific classifications of the most recent (November 2023) version of the ICIO table, which has been used for the impact analysis of the FIFA World Cup™, and which follows the ISIC Rev 4 classification, and the list of countries represented in the ICIO Table.

4.3 Direct, Indirect and Induced impacts

4.3.1 Impacts description

Expenditure, in all its components, affects the economy, leading to a demand shock for products and services.

This demand directly activates the sectors in which the spending takes place and propagates in the world economy indirectly through linkages between sectors and in an induced manner through household income spending. The resulting impact can be measured along several dimensions. Specifically, concerning the impact on value added, we can define:

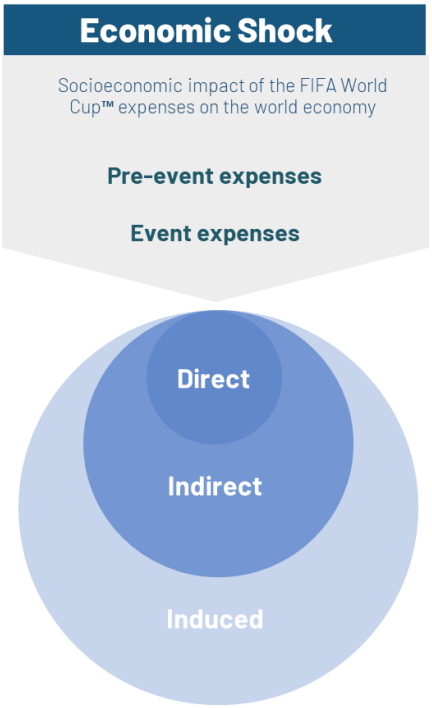
- **DIRECT impact**: refers to the value added generated by sectors involved in the realization

of the event.

- **INDIRECT impact**: entails all the global value added of the sectors supplying goods and services through value chains.
- **INDUCED impact**: is the effect on global value added given by additional expenditure of households' income on goods and services.

The infographic below schematically explains the process, from the definition of the shock to the direct, indirect and induced propagation of spending.

Figure 4: schematic representation of impacts' propagation.



Source: OpenEconomics elaboration

To clarify what each round of impacts entails, we can consider the example of the travel and accommodation expenses related to the FIFA World Cup™:

- In this case, the direct impact is the value added generated in that specific sector, namely labor bills, and revenues from the sale of goods and services provided by accommodation facilities, restaurants, and similar businesses.
- The Indirect impact, then, stems from the increase in value added along the value chains activated by the food and accommodation sector, such as demand for unprocessed food, telecommunications, real estate services (including travel agencies), general wholesale intermediate goods, and agricultural goods.
- Finally, the induced impact is determined by the effect of reintroducing household income

into the economy, meaning that people benefiting from the direct and indirect increases in value added spend part of their income on goods and services that in turn activate global value chains.

Within the standard Input-Output framework, it is possible to compute the direct and indirect impact on Value Added of an investment. In order to include the induced effect of the expenditure of the FIFA World Cup 2026™, the basic ICIO table has been extended endogenizing household income and expenditure. This implies that the standard open model by Leontief is partially closed, allowing for the computation of the so-called type II multiplier.

4.3.2 The Type II Multiplier

The type II multiplier represents an evolution of the classical Leontief multiplier, which entails the inclusion of induced effects in the endogenous part of the model. To obtain such results, the standard ICIO table has been further elaborated with the addition of external data on value added composition.

First off, the Value-Added has been detailed further into its constituent elements: labor, capital, and taxes on production. This refinement was achieved using data from the OECD Supply and Use Table.

Subsequently, household income—originating from labor compensation—has been introduced as a new segment within the matrix.

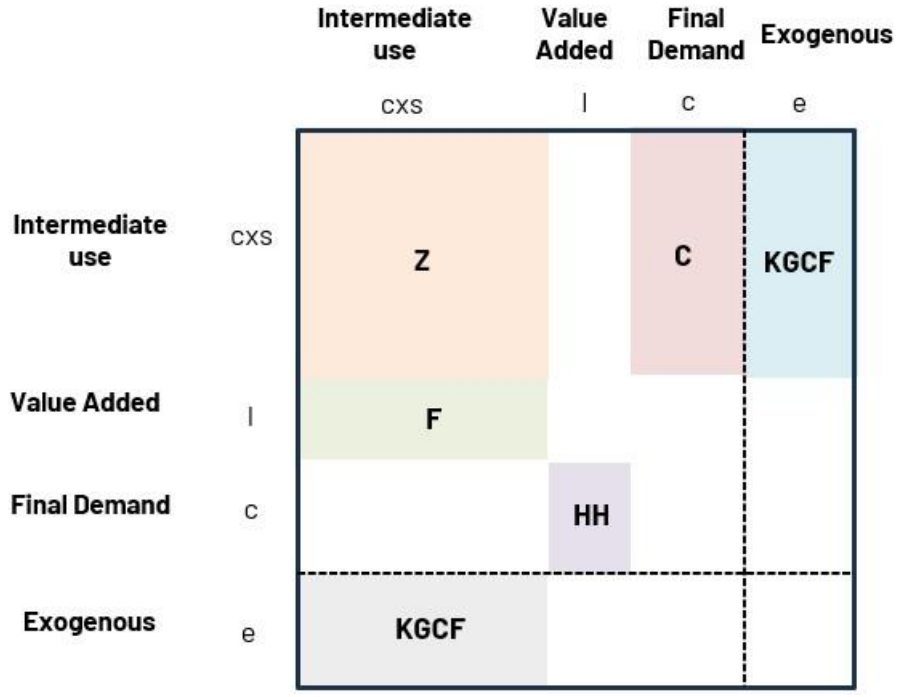
Furthermore, within this revised structure, Final Demand is characterized by the expenditure of the entire household income on final goods. This assumes that income from capital and income from taxes on production are considered as leakages of the system.

The resulting economic system can be summarized in the following fundamental blocks:

- Production sectors (Z),
- Labor (part of Value Added) (F),
- Households Income (HH),
- Capital and Taxes (both part of the Value Added), and Capital Formation (KGCF),
- Final (Household) Demand (C).

Compared to figure 3, the new index "l" denotes the labor component of Value Added and "e" denotes the exogenous components of the matrix, i.e. Capital, Taxes on Production and Capital Formation.

Figure 5: ICIO structure for Type II Multiplier



Source: OpenEconomics elaboration

The structure of the economy is then represented by a square Inter-Country Input-Output matrix that has the above-mentioned blocks as both originators and recipients of transaction flows (payments and receipts), which constitute the visible outcomes of economic activity.

4.4 Mathematical formulation of the model

The input-output (IO) table shown here technically illustrates an accounting equilibrium, balancing the total income and expenditure across various agents. Each row of the matrix represents an agent's income (such as the sale of goods and services by one sector, or the wages received by households), while each column represents its expenditure (such as the purchase of intermediate goods from other sectors, or household consumption).

A fundamental element of the Input-Output model is the analysis of interdependencies between sectors: the production of each output requires the combination of several intermediate goods (which are outputs of other sectors), together with primary inputs. Thus, it becomes clear that production for final consumption represents only a fraction of the total economic output: a substantial part of the output enters various intermediate processes before it is transformed into a final consumer good. Moreover, part of the income generated by the sale of the final good constitutes an additional demand shock on the part of those who receive it. Therefore, in addition to defining the transactions between sectors, production factors and institutions, the model represents the production structure of economic sectors and the spending habits of final consumers (households).

In fact, by considering the ratio between the individual element of the matrix and the respective column total (equal to the value of output or total income), it is possible to obtain the matrix of coefficients representing the production technology of sectors and the marginal propensity to consume of institutional agents (households), thus defining a resource distribution scheme within the economy. On this basis, the model represents a suitable tool for analyzing how an input of resources due to an increase in demand cyclically activates the production chains on the supply side, providing information on how a demand shock contributes, in a direct, indirect and induced manner, to the formation of the main economic aggregates of a specific geographical area.

This theoretical framework can be configured mathematically with the following equilibrium relation:

1) $$\underset{(Nx1)}{X} = \underset{(NxN)}{A}\,\underset{(Nx1)}{X}$$

where X represents the total value of the variables in the ICIO table and A the relevant coefficient matrix.

Alongside the investment and public consumption sectors, capital and production taxes are deemed exogenous. Mathematically, this concept is represented as follows:

2) $$\underset{(N_e x1)}{X_e} = \underset{(N_e x N_e)}{A_e}\,\underset{(N_e x1)}{X_e} + \underset{(N_e x1)}{Y}$$

Where Y represents the vector of exogenous variables, while the other components (identified with subscript *e*) constitute the endogenous component of the model. The subscript *e* indicates the fact that the equation only concerns the rows corresponding to the endogenous variables. Mathematically, the transition from the closed representation of the matrix to the distinction between endogenous and exogenous variables is crucial to ensure the non-singularity of the coefficient matrix.

More precisely, the mathematical formulation of the model in the context of impact assessment involves a differential approach: what the analysis aims to measure is how the economy responds to the exogenous change in final demand due to the expenditure of the FIFA World Cup 2026™. Starting from the formulation in levels, it is possible to distinguish two states: the state "with" the World Cup (1) and the state "without" it (0):

3) $X_0 = A_o X_0 + Y_0$

4) $X_1 = A_1 X_1 + Y_1$

Considering the difference between the two equilibrium conditions, we obtain:

5) $\Delta X = A_1 X_1 - A_0 X_0 + \Delta Y$

whence:

6) $\Delta X = A_1X_1 - A_0X_0 + A_0X_1 - A_0X_1 + \Delta Y \Rightarrow \Delta X = A_0\Delta X + \Delta AX_1 + \Delta Y$

7) $\Rightarrow \Delta X = (I - A_0)^{-1}(\Delta AX_1 + \Delta Y)$

Equation (7) defines the basic mechanism of the process of evaluating the impact of the shock. Typically, the demand shock corresponding to the economic stimulus generated by investments is identified in the term ΔY. It thus represents the shock vector resulting from the expenditure due to the FIFA World Cup 2026™. The term ΔAX_1 instead represents a structural shock; in particular, the differential between the two coefficient matrices represents the expected change in the productive structure following the realisation and implementation of the project under analysis. In the investment phase, therefore, this term is assumed to be zero, with the implication that the increase in final demand does not entail a change in the production structure, and therefore in the production technology of the companies.

The element that defines the level of production required to satisfy a final increment is the Leontief multiplier matrix $L = (I - A_0)^{-1}$. This matrix is the result of the iterative effect brought about by the replication of the propagation mechanism of economic flows along value chains and the repeated interactions between different economic agents. Algebraically, the Leontief multipliers can be derived iteratively as follows (using simplified notation):

8) $X = AX + Y \Rightarrow X = A(AX + Y) + Y \Rightarrow X = A^2X + AY + Y$

   For $n \to N$ we obtain: $X = A^NX + (I + A + A^2 + \cdots + A^N)Y$

   $(I - A)X = A^NX - A^{N+1}X + (I - A^{N+1})Y$

   Since $\nexists\, \lambda \in \sigma(A) > 1$, for $N \to \infty \Rightarrow A^N, A^{N+1} \to \mathbf{0}$

9) $\Rightarrow (I - A)X = Y \Rightarrow X = (I - A)^{-1}Y$

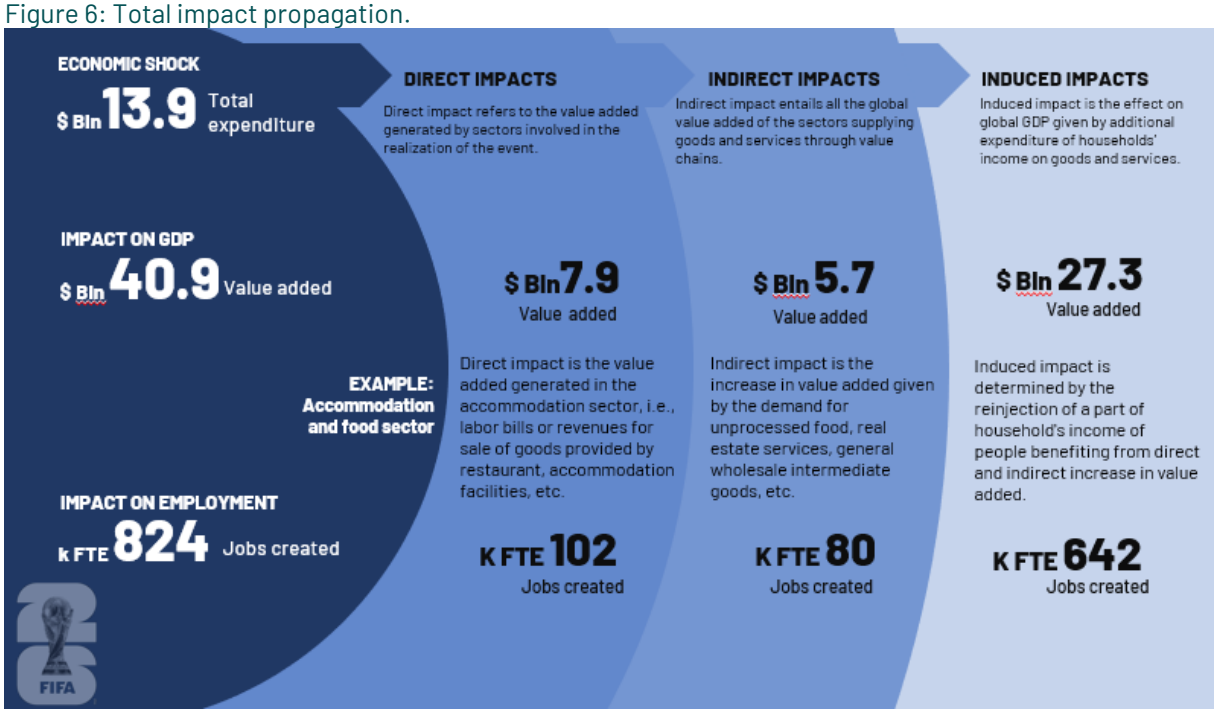
This iterative derivation, which uses the convergence of the geometric series for the derivation of closed-form multipliers, is useful to differentiate the concepts of direct, indirect, induced impact and the shock component. In the nomenclature typically adopted, the demand shock is represented by ΔY. With reference to the direct effect, it refers to the level of output and value added required by the first tier of suppliers to satisfy final demand; mathematically, $\Delta X_{direct} = A\Delta Y$. The impacts due to the involvement of the chain of suppliers by the sectors directly involved in the project constitute the indirect impacts ($\Delta X_{indirect} = (I - A)^{-1}\Delta Y$), while the increase in output due to the re-injection of income into the economic system in the form of consumption by income earners constitutes the induced impact impacts ($\Delta X_{induced} = (I - A')^{-1}\Delta Y$, where A' is the coefficient matrix with endogenous labor and household's accounts). Formally, the matrix L

obtained from our modified Input-Output accounts for both types of effects simultaneously. For a precise distinction of the two effects, it is necessary to carry out an analysis with an open model (standard Input-Output type) that does not consider the distribution of income to the holders of the factors of production.

5 OUTPUT DIMENSIONS

The propagation of the FIFA World Cup™ impact is depicted in the following dashboard, which illustrates how the effects on value added and employment are broken down into direct, indirect, and induced components. In this analysis, the impact on value added reflects the contribution to GDP, as it aggregates the additional economic value generated across all affected sectors of the host economy. Alongside definitions of these three impact types, an example is provided to demonstrate what they might represent:

Figure 6: Total impact propagation.



Source: OpenEconomics elaboration

As described in the previous chapter, although direct, indirect and induced impacts are computed in a different way, the algebraic structure of the impact vector ΔX is always coherent with the structure of the ICIO matrix described in figure 5, allowing us to apply the same mathematical elaboration in order to get all output dimension at all stages.

The output vector ΔX entails the following endogenous elements:

$$10)\ \Delta X = \begin{bmatrix} \Delta S \\ \Delta L \\ \Delta HH \end{bmatrix}.$$

Where ΔS represents the impact on the value of production for each country and sector, while ΔL and ΔHH represent the impact on labor and household income. In addition, the coefficient matrix A, including also exogenous accounts, can be divided into specific sub-matrices:

11) $A = \begin{bmatrix} S \\ L \\ HH \\ K \\ G \end{bmatrix}$.

The total GDP impact is computed by exploiting the properties of the ICIO table and is thus given by the sum of its labor component (ΔL) and the one related to capital and indirect taxes, given by the expressions $K\Delta S$ and $G\Delta S$:

12) $\Delta GDP = \Delta L + K\Delta S + G\Delta S$

In a similar way, employment impact, that is the labor force required to produce the output ΔX determined by the project, is derived as follows:

13) $\Delta FTE = \Delta L * \{W^{-1}\}$.

Where the diagonal matrix W refers to the average gross wages of full-time workers by country (sources: OECD, ILOSTAT and UNECE). The impact on employment is then expressed in FTE (full-time equivalent).

In addition to the impacts represented in figure 6, a broader set of results can be obtained.

First, it is possible to use a portion of the coefficient matrix derived from ICIO table to distribute the impact on sectoral value added: by naming F the sub-matrix of A corresponding to the value-added rows (L and K), it is possible to obtain algebraically the sectoral distribution of the value-added impact as follows:

14) $\Delta VA = F * (I - A)^{-1}\Delta Y => F * \Delta S$

In this way, the impact on sectoral value added is derived as a share of the impact on the value of production, which instead is a raw output of the model (ΔS). The same is true for the impact on household income (ΔHH) while, a proxy of fiscal revenues due to the FWC can be obtained in a similar way with respect to total value-added impact, that is by multiplying the portion of the ICIO coefficients' matrix containing the information on the share of taxes paid by industries and households in each country by their respective incomes impact. Denoting said taxes coefficient matrix with the letter G, we get:

15) $\Delta Fiscal\ Revenue = G * \Delta X => G * \Delta S + G * \Delta HH$

6 TECHNICAL DESCRIPTION OF THE SROI ANALYSIS

The Social Return on Investment (SROI) analysis conducted for the FIFA World Cup 2026™ adopts the Human Foundation methodology and is structured as a forecast (ex-ante) evaluation.

Based on Social Generally Accepted Accounting Principles (SGAAP), the SROI methodology serves as a valuable tool for measuring a broader concept of value, as it goes beyond purely economic and financial logic by capturing the social changes generated by an initiative.

This methodological framework is specifically designed to assess the potential social value generated by large-scale initiatives, by anticipating the outcomes and translating them into monetary terms. In this case, the SROI analysis focuses on four primary benefit domains: sports participation benefits, entertainment benefits, tourism-related benefits, and legacy effects.

6.1 Stakeholder Mapping and Materiality Assessment

The analysis initiates with a comprehensive stakeholder mapping process aimed at identifying those who will be directly or indirectly affected by the event. These include local communities, sports participants, spectators, tourists, healthcare systems, law enforcement agencies, and businesses in the host cities. Stakeholder engagement is carried out through consultations, interviews, and workshops to capture anticipated changes from multiple perspectives.

Following this, a materiality assessment is conducted to select outcomes that are relevant and significant from the stakeholders' viewpoint. Only those outcomes that stakeholders consider important and that are expected to be substantially impacted by the tournament are retained for further analysis. This ensures that the analysis reflects only the most meaningful and attributable changes.

6.2 Theory of Change Development

A Theory of Change (ToC) is developed to map the logical connections between the World Cup's activities and the expected social outcomes. This model captures the transformation pathway from inputs to activities, outputs, and ultimate outcomes. For example, public outreach campaigns and the visibility of the tournament are anticipated to inspire new individuals to begin engaging in sports. This behavioral shift leads to improvements in health, lower crime rates, and fewer sports injuries due to improved physical fitness.

Similarly, the ToC accounts for entertainment and leisure benefits arising from viewership and attendance, as well as increased economic activity due to tourism. Legacy effects, such as ongoing sports engagement and enhanced regional reputation, are also projected over a four-year

horizon following the event.

6.3 Outcome Indicators Definition

To evaluate these outcomes, specific indicators are forecasted based on stakeholder expectations, empirical studies, and secondary data from previous mega-events. The core Key Performance Indicators (KPIs) used in the analysis are:

- **Sports Participation Benefits:**
    - Number of new individuals beginning regular sports practice.
    - Associated reductions in healthcare costs due to healthier lifestyles.
    - Declines in crime rates linked to increased youth engagement in structured activities.
    - Changes in healthcare expenditure related to fewer injury treatments.
- **Entertainment Benefits:**
    - Total spectator hours (live and broadcast).
    - Estimated value of leisure time based on average wage equivalents.
- **Tourism Benefits:**
    - Number of inbound international tourists attending the event.
    - Associated expenditures in accommodation, food services, and local attractions.

Each indicator is projected using available baseline data and stakeholder estimates, allowing for a comprehensive representation of expected outcomes.

6.4 Financial Proxies and Valuation of Outcomes

Monetary values are assigned to each outcome using financial proxies derived from publicly available sources, including health economics data, labor market statistics, tourism expenditure averages, and studies on the value of leisure time. In this case:

- Savings on healthcare costs are valued based on the average public health expenditure per capita for lifestyle-related conditions.
- Reductions in crime are monetized using the estimated cost savings per prevented criminal offense.
- Entertainment value is calculated using the value-of-time approach, where leisure hours are valued at a fraction of average hourly earnings.

- Tourism-related expenditures are estimated using average per-visitor spend in the U.S. travel market.

All proxies are justified with references and contextualized for the hosting countries setting of the 2026 event.

6.5 Impact Estimation: Deadweight, Attribution, Displacement, Drop-off

To determine the net impact of the event, the analysis adjusts for the following factors:

- **Deadweight:** The portion of the outcome that would have occurred independently of the event. For instance, existing trends in sports participation are accounted for.
- **Attribution:** External contributors to each outcome, such as concurrent public health campaigns or regional tourism promotions.
- **Drop-off:** Particularly relevant for legacy outcomes, drop-off models the gradual decline in benefits over the four-year post-event period.

These adjustment factors are applied conservatively to ensure only value truly attributable to the World Cup is included.

6.6 Discounting and SROI Ratio Calculation

In the context of social impact assessment, many of the benefits generated by an initiative or intervention accrue over an extended time horizon, often beyond the initial implementation year. To accurately reflect the present value of these future benefits, a social discount rate is applied. This rate, typically set at 3% following the established public economic evaluation guidelines, ensures temporal consistency in the valuation of benefits and allows for the comparison of costs and outcomes that occur at different points in time.

The Social Return on Investment (SROI) ratio is subsequently computed by dividing the total present value of the benefits by the total value of the inputs or investments required to generate those outcomes. This ratio encapsulates the efficiency and effectiveness of the intervention in producing positive social outcomes per unit of investment.

Overall, this methodological framework enables the SROI approach to serve as a comprehensive and credible tool for capturing the possibilities of social value generated by a given intervention, going well beyond traditional financial metrics.

7 APPENDIX

ICIO sectoral disaggregation.

	Code	new .Stat code	Industry	ISIC Rev.4
1	D01T02	A01_02	Agriculture, hunting, forestry	01, 02
2	D03	A03	Fishing and aquaculture	03
3	D05T06	B05_06	Mining and quarrying, energy producing products	05, 06
4	D07T08	B07_08	Mining and quarrying, non-energy producing products	07, 08
5	D09	B09	Mining support service activities	09
6	D10T12	C10T12	Food products, beverages and tobacco	10, 11, 12
7	D13T15	C13T15	Textiles, textile products, leather and footwear	13, 14, 15
8	D16	C16	Wood and products of wood and cork	16
9	D17T18	C17_18	Paper products and printing	17, 18
10	D19	C19	Coke and refined petroleum products	19
11	D20	C20	Chemical and chemical products	20
12	D21	C21	Pharmaceuticals, medicinal chemical and botanical products	21
13	D22	C22	Rubber and plastics products	22
14	D23	C23	Other non-metallic mineral products	23
15	D24	C24	Basic metals	24
16	D25	C25	Fabricated metal products	25
17	D26	C26	Computer, electronic and optical equipment	26
18	D27	C27	Electrical equipment	27
19	D28	C28	Machinery and equipment, nec	28
20	D29	C29	Motor vehicles, trailers and semi-trailers	29
21	D30	C30	Other transport equipment	30
22	D31T33	C31T33	Manufacturing nec; repair and installation of machinery and equipment	31, 32, 33
23	D35	D	Electricity, gas, steam and air conditioning supply	35
24	D36T39	E	Water supply; sewerage, waste management and remediation activities	36, 37, 38, 39
25	D41T43	F	Construction	41, 42, 43
26	D45T47	G	Wholesale and retail trade; repair of motor vehicles	45, 46, 47
27	D49	H49	Land transport and transport via pipelines	49
28	D50	H50	Water transport	50
29	D51	H51	Air transport	51
30	D52	H52	Warehousing and support activities for transportation	52
31	D53	H53	Postal and courier activities	53
32	D55T56	I	Accommodation and food service activities	55, 56
33	D58T60	J58T60	Publishing, audiovisual and broadcasting activities	58, 59, 60
34	D61	J61	Telecommunications	61
35	D62T63	J62_63	IT and other information services	62, 63
36	D64T66	K	Financial and insurance activities	64, 65, 66
37	D68	L	Real estate activities	68
38	D69T75	M	Professional, scientific and technical activities	69 to 75
39	D77T82	N	Administrative and support services	77 to 82
40	D84	O	Public administration and defence; compulsory social security	84
41	D85	P	Education	85
42	D86T88	Q	Human health and social work activities	86, 87, 88
43	D90T93	R	Arts, entertainment and recreation	90, 91, 92, 93
44	D94T96	S	Other service activities	94,95, 96
45	D97T98	T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97, 98

Source: OECD

ICIO country coverage.

	Code	countries
1	ARG	Argentina
2	AUS	Australia
3	AUT	Austria
4	BEL	Belgium
5	BGD	Bangladesh
6	BGR	Bulgaria
7	BLR	Belarus
8	BRA	Brazil
9	BRN	Brunei Darussalam
10	CAN	Canada
11	CHE	Switzerland
12	CHL	Chile
13	CHN	China (People's Republic of)
14	CIV	Côte d'Ivoire
15	CMR	Cameroon
16	COL	Colombia
17	CRI	Costa Rica
18	CYP	Cyprus (1)
19	CZE	Czechia
20	DEU	Germany
21	DNK	Denmark
22	EGY	Egypt
23	ESP	Spain
24	EST	Estonia
25	FIN	Finland
26	FRA	France
27	GBR	United Kingdom
28	GRC	Greece
29	HKG	Hong Kong, China
30	HRV	Croatia
31	HUN	Hungary
32	IDN	Indonesia
33	IND	India
34	IRL	Ireland
35	ISL	Iceland
36	ISR	Israel (2)
37	ITA	Italy
38	JOR	Jordan
39	JPN	Japan
40	KAZ	Kazakhstan
41	KHM	Cambodia
42	KOR	Korea
43	LAO	Lao (People's Democratic Republic)
44	LTU	Lithuania
45	LUX	Luxembourg
46	LVA	Latvia
47	MAR	Morocco
48	MEX	Mexico
49	MLT	Malta
50	MMR	Myanmar
51	MYS	Malaysia
52	NGA	Nigeria
53	NLD	Netherlands
54	NOR	Norway
55	NZL	New Zealand
56	PAK	Pakistan
57	PER	Peru
58	PHL	Philippines
59	POL	Poland
60	PRT	Portugal
61	ROU	Romania
62	RUS	Russian Federation
63	SAU	Saudi Arabia
64	SEN	Senegal
65	SGP	Singapore
66	SVK	Slovakia
67	SVN	Slovenia
68	SWE	Sweden
69	THA	Thailand
70	TUN	Tunisia
71	TUR	Türkiye
72	CHT	Chinese Taipei
73	UKR	Ukraine
74	USA	United States
75	VNM	Viet Nam
76	ZAF	South Africa
77	CHT	Rest of the World
	Countires introduced in 2022 edition.	

Source: OECD

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