



Ministry
of Sport



2014 World Cup in Brazil Economic impact

Brasilia, March 31st, 2010

Overview

- This study has been prepared by the 2014 World Cup Consortium, a joint-venture commissioned by the Ministry of Sport, with the associate company Value Partners Brasil Ltda playing a special role.
- The methodologies adopted to calculate direct and indirect economic impact on the Brazilian economy are based on internationally adopted methodologies, especially the following literature:
 - Handbook on the economics of sport – Wladimir Andreff, Stefan Szymastic
 - Predicting the economic impact of the 2010 FIFA World Cup on South Africa
 - What does Germany expect to gain from hosting the 2006 Football World Cup; Macroeconomic and Regional economic Effects
 - Economic Impact of the Korea and Japan World Cup
 - France and The 1998 World Cup – The National Impact of a World Sporting
- The investments considered by the study for the 2014 FIFA World Cup include those directly related to the event (e.g.: stadiums) and those that will have their implementation accelerated or advanced (e.g.: airports). This concept was also taken into consideration for the assessment of the World Cup economic impact on other countries, allowing for the comparability of this study with previous ones. This premise, however, does not necessarily create a common scope of infrastructure areas, for each government has different investment priorities for hosting the World Cup (e.g.: German government prioritized investment in the country's highway grid in connection with the World Cup; but this is not a priority for the World Cup to be held in Brazil).
- Regarding investments in infrastructure, this study is based on economic projections for:
 - Projects and financing lines contracted by Feb 28, 2010 (urban mobility, stadiums and hotels);
 - Internal government estimates for projects under preparation, but not contracted (airports and ports)
 - Market estimates adjusted to other intervention areas (Security, IT, Telecommunications and others)
- Regarding projections on the flow of tourists, this study is based on estimates made by technicians and involves the combination of two methodologies:
 - Estimates from elementary data about tourist movement in fan fest matches (“bottom-up” approach)
 - Estimates from international references relative to global projections for tourism in Brazil (“top-down” approach)



Document contents

- **Summary**

- Methodology for impact assessment
- Economic impacts of the World Cup in Brazil

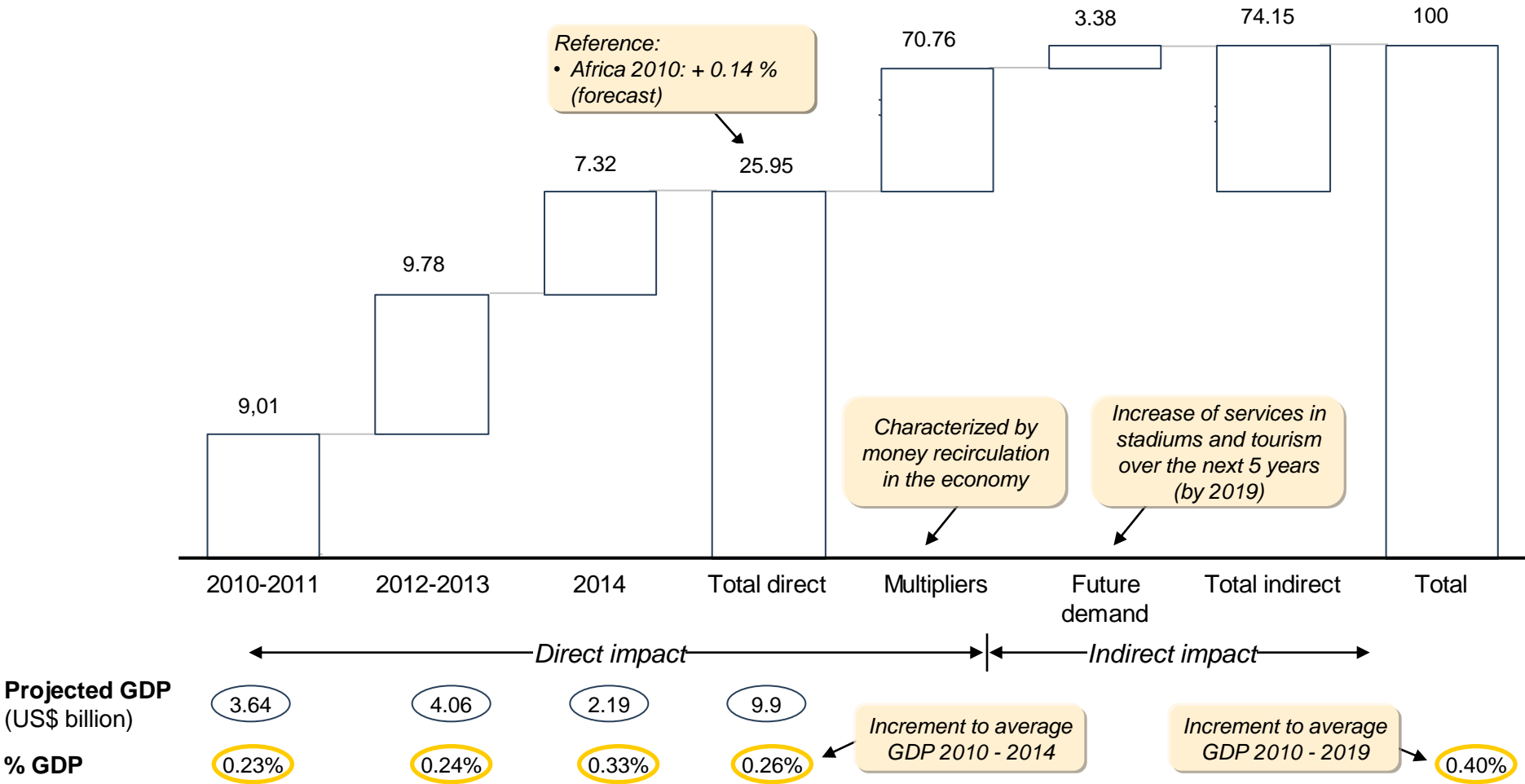


Executive summary


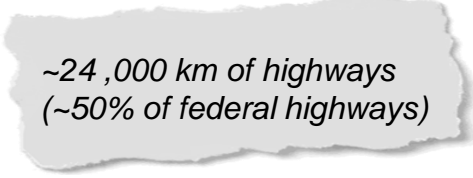



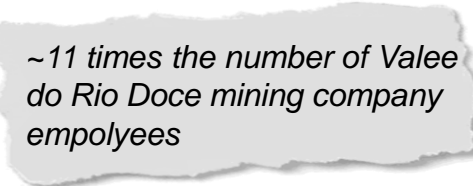



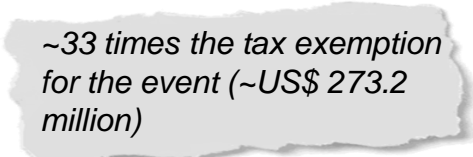
- The Ministry of Sport, through the commissioned consultants of the 2014 World Cup Consortium, particularly the associate company Value Partners Brasil Ltda., which specializes in the segment of international sports, has developed an econometric model to calculate the potential economic impacts resulting from the World Cup to be held in Brazil.
- For this purpose, two types of impacts have been assessed: direct, which are directly connected with the event; and indirect, which are accounted for their stimulus to other economic activities induced by the direct effects, that is, money 'recirculation' within the economy.
- Potential economic impacts resulting from the World Cup held in Brazil may reach nearly US\$ 100 billion – with ~US\$ 26.2 billion (26%) direct; and US\$ 74.3 billion (74%) indirect.
- The direct economic benefits of the World Cup result from growth/increase of pre-determined dimensions, which have been accounted for in each variable for GDP calculation, already considering import effects:
 - investments in infrastructure: US\$ 18 billion;
 - incremental tourism: US\$ 5.13 billion
 - job generation: 330,000 permanent and 380,000 temporary jobs
 - increase in the consumption of families: US\$ 2.73 billion;
 - tax collection: US\$ 9.18 billion
- Investments in infrastructure are the variable with the greatest value (~US\$ 18 billion) and influence in the direct impacts, because, in addition to being directly accounted for in the GDP, they are investments with high potential for job and tax generation, and they really matter for money recirculation later on.
- Finally, aimed at ensuring the materialization of the potential macroeconomic result deriving from an event such as the World Cup, we conclude that it is important for the public sector to:
 - Plan in detail the infrastructure works, promotional activities, and initiatives related to tourism, in order to secure the expected impact
 - Encourage foreign tourists to extend their stay, and more tourists to attend the event, in order to expand the event's impact on the hospitality sector



The 2014 World Cup economic impacts may reach over US\$ 100 billion, out of which 73% refer to indirect impacts on the economy



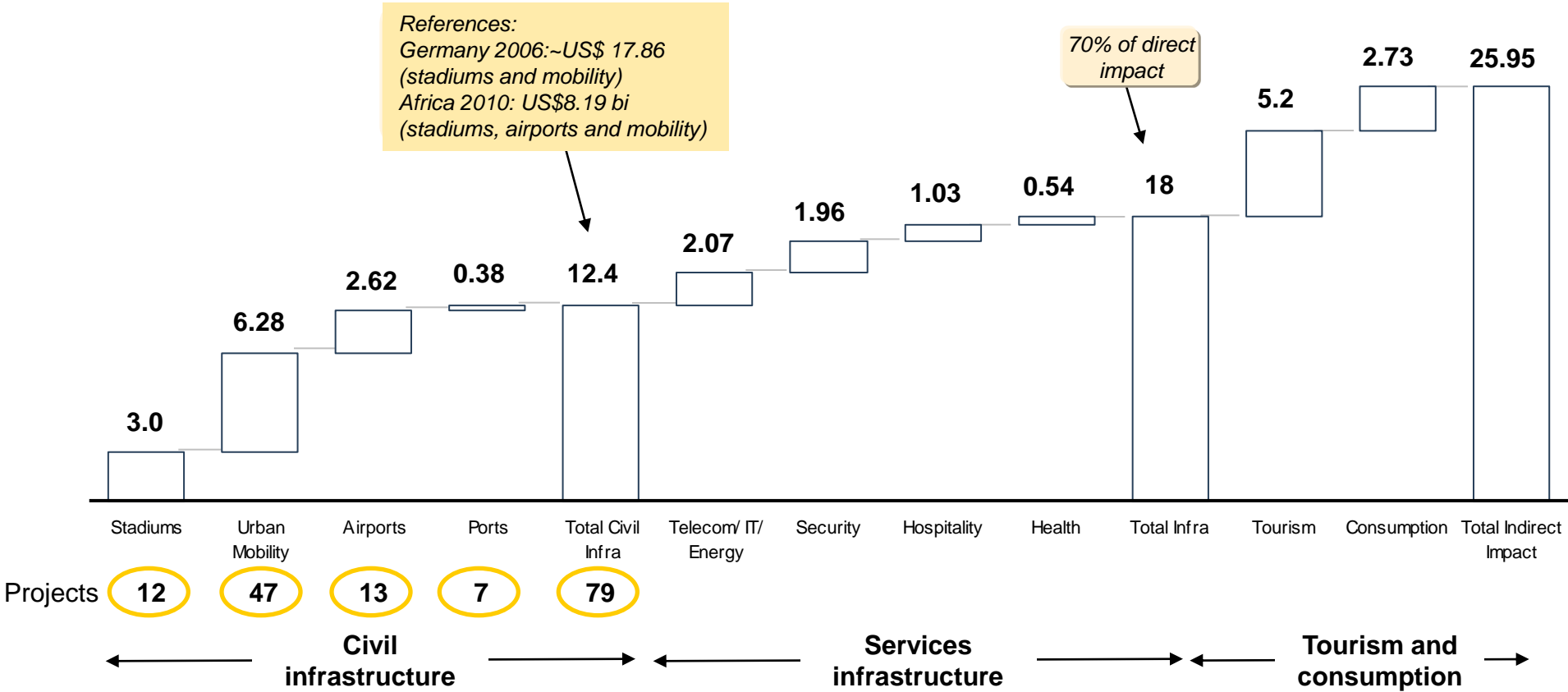
World Cup direct economic benefits are the result of growth in a number of components in the country

Sectors	Impact	Equivalent to:
A  <ul style="list-style-type: none"> • Infrastructure <ul style="list-style-type: none"> - Stadiums - Airports - Mobility - Others 	<ul style="list-style-type: none"> • Civil: US\$ 12.56 billion • Services: US\$ 5.46 billion 	 <p>~24 ,000 km of highways (~50% of federal highways)</p>
B  <ul style="list-style-type: none"> • Tourism 	<ul style="list-style-type: none"> • 600,000 foreign tourists (US\$ 2.13 bi) • 3,1 million domestic tourists (US\$ 3 bi) 	 <p>~2/3 of Rio's population (Brazil's 2nd largest city)</p>
C  <ul style="list-style-type: none"> • Job generation 	<ul style="list-style-type: none"> • Permanent jobs: 332,000 (2009-2014) • Temporary jobs: 381,000 (2014) 	 <p>~11 times the number of Vale do Rio Doce mining company employees</p>
D  <ul style="list-style-type: none"> • Consumption 	<ul style="list-style-type: none"> • Increment in consumption: US\$ 2.73 bi (2009-2014) 	 <p>~ 1.3 year selling refrigerators in Brazil (7.2 million)</p>
E  <ul style="list-style-type: none"> • Taxes 	<ul style="list-style-type: none"> • Total taxes: US\$ 9.18 bi • Federal taxes: US\$ 5.79 bi (63%) 	 <p>~33 times the tax exemption for the event (~US\$ 273.2 million)</p>



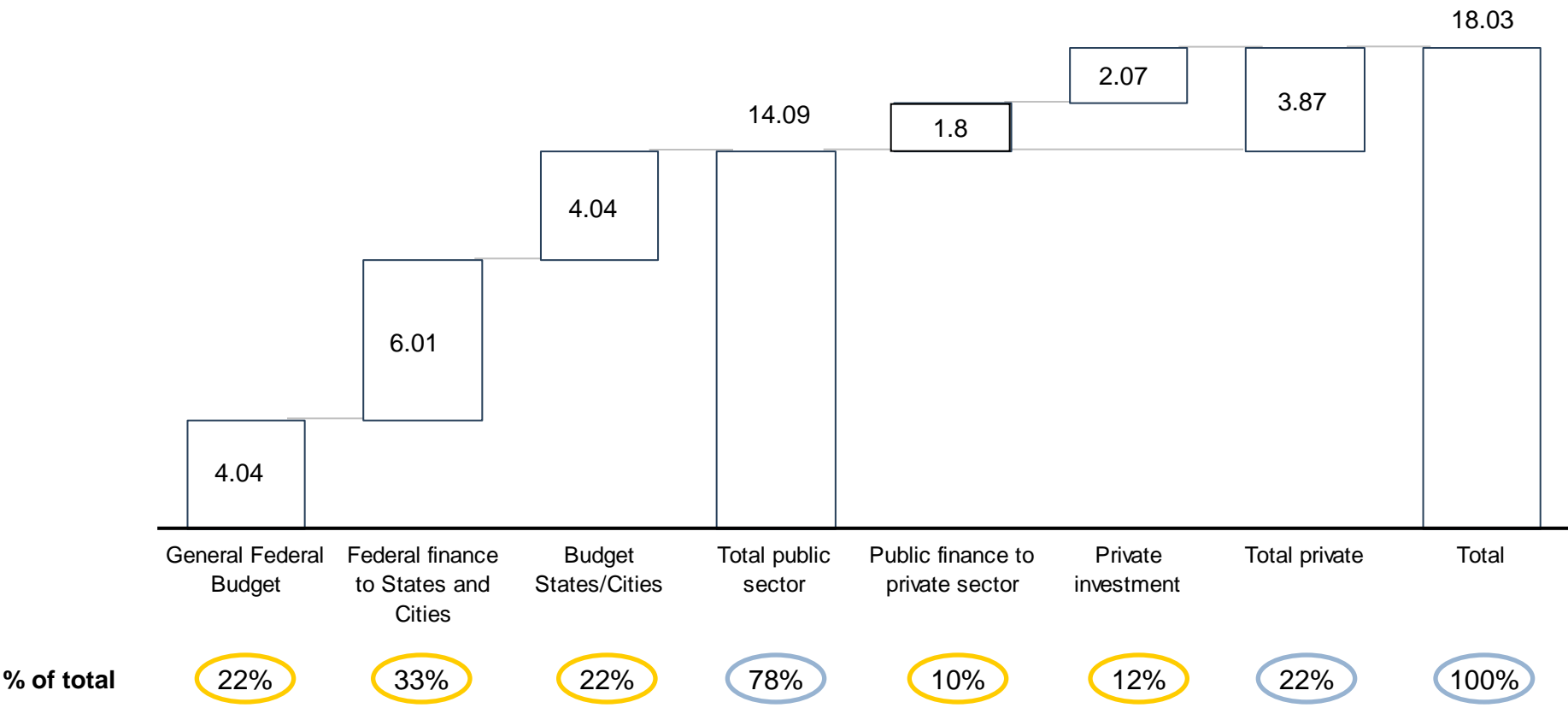
Investments in infrastructure total US\$ 18 billion, representing ~70% of direct impact

US\$ Billion

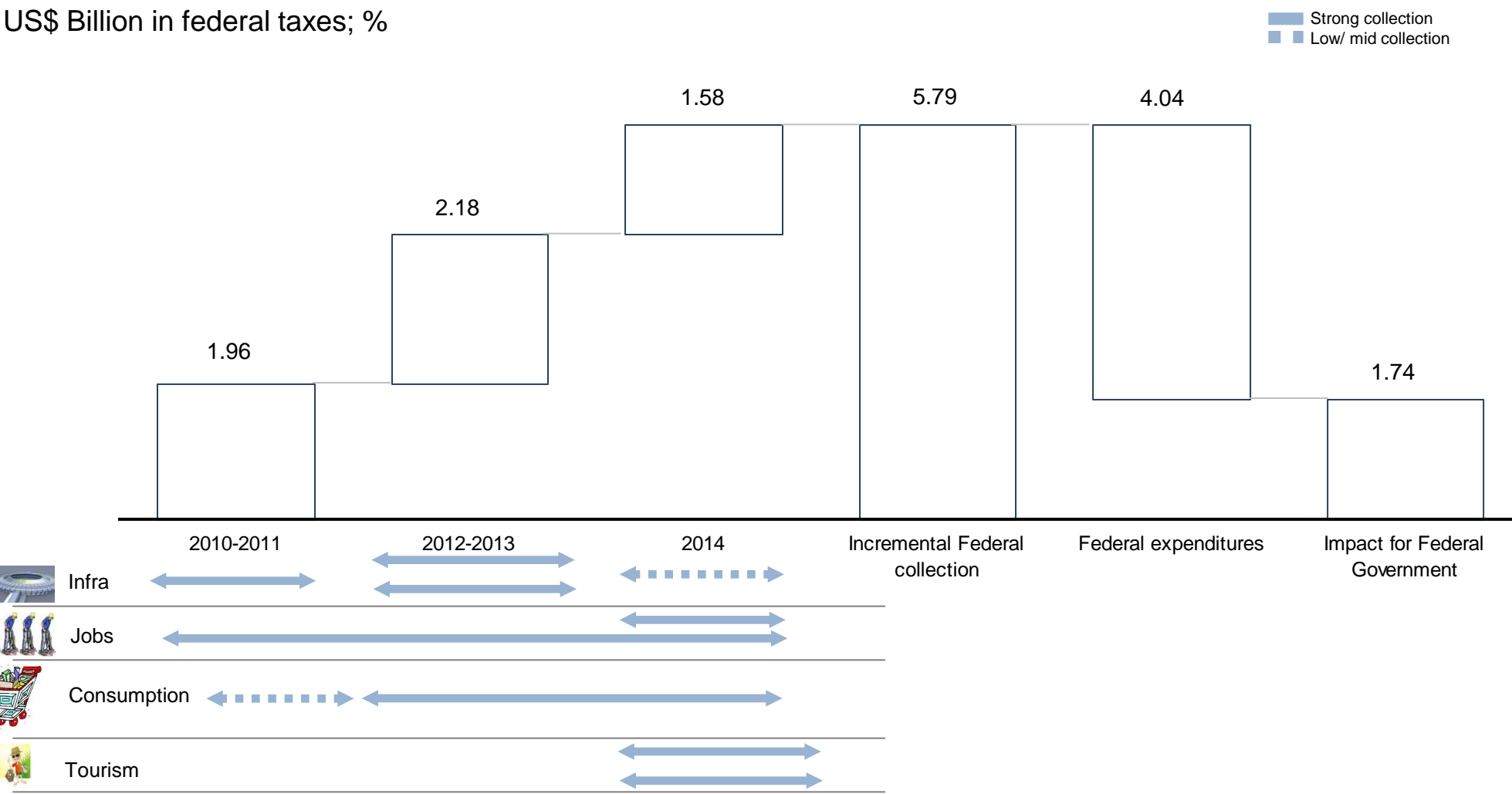


~78% of 2014 World Cup investments in infrastructure will originate in the public sector

US\$ Billion



~US\$ 6 billion in federal taxes will be collected by 2014, generating a net return of US\$ 1.74 billion to Federal Government



In addition to economic impact, there are a number of intangible benefits that should also be taken into consideration

International visibility

- Change in the **Brazilian image abroad**:
 - Strengthening of the image as a **joyful, friendly country**
 - New attributes to the Brazilian image: **competence, organization and development**
- Higher exposition for **products and services**, particularly those in which **Brazil has competitive advantages**
- Implementation and dissemination of **green technologies (fuels, building, ...)**

Tourism

- Better use of **Brazil's tourism potential** (current number of tourists is comparable to that of Argentina and ¼ of Mexico's)
- Dissemination of **regional tourist attractions and increase of domestic tourism**, especially still unexploited destinations
- **Qualitative leap** in services connected to the sector (hospitality, food, taxis, ...):

Infrastructure

- Improvement in the **quality of services/ life quality** for the population:
 - **Modern technologies** in transports
 - Increased **comfort at stadiums**
- Platform for **productivity gains** in the private sector
- Creation of **new centers/vectors** of development

Institutional improvement

- Improvement in **public management control**
- Increased **integration between Brazilian regions**
- Strengthening of the **national pride** (being Brazilian)



Public sector actions are necessary to materialize the positive impact on the economy

Action lines for the public sector

Planning of infrastructure works

- To **prioritize interventions** that will produce the greatest legacy to the country
- To supervise **intensively and closely** the execution of works
- To plan for and execute according to available **forecast budget**

Image of Brazil to the World

- To promote **institutional campaigns** throughout the world
- To ensure **consistency** in determining objectives and performance of actions (to ensure the same message is conveyed)
- **Efficiency** in efforts (assessment of cost vs. audience reached)

Tourism development

- To persuade tourists to extend their stay in Brazil
- To ensure tourists will enjoy **high quality services** (incentive to workforce qualification)



Tourism is particularly responsive to actions for maximizing impacts

Maximizing Impact	Action line	Impact	Possible actions
	<div>+</div> To encourage foreign tourists to extend their stay	<ul style="list-style-type: none"> Each day added to the total foreign tourist volume represents an increase of US\$ 335,5 million 	<ul style="list-style-type: none"> Institutional campaigns Events/ exhibitions in Brazil in pre- and post-Cup periods Incentive for travel agencies to sell extended packages
	To encourage a larger number of foreign tourists to attend the event	<ul style="list-style-type: none"> A 10% increase in the basic number of tourists, i.e. 60,000 tourists, would represent a US\$ 215.8 million addition 	<ul style="list-style-type: none"> Use of media Institutional campaigns International expos/events stimulating the visit by foreigners Agreements with international travel agencies to disseminate the event in Brazil
<div>-</div>	To encourage a larger number of domestic tourists to attend the event	<ul style="list-style-type: none"> A 5% increment in the World Cup factor (representing approximately additional 170,000 domestic tourists) represents a US\$ 149.2 million addition 	<ul style="list-style-type: none"> Institutional campaigns in Brazil Events of national interest Dissemination of fan fests to attract audiences with no tickets for the matches



Document contents

- Summary
- **Methodology for assessment of impacts**
- Economic impacts of the World Cup in Brazil

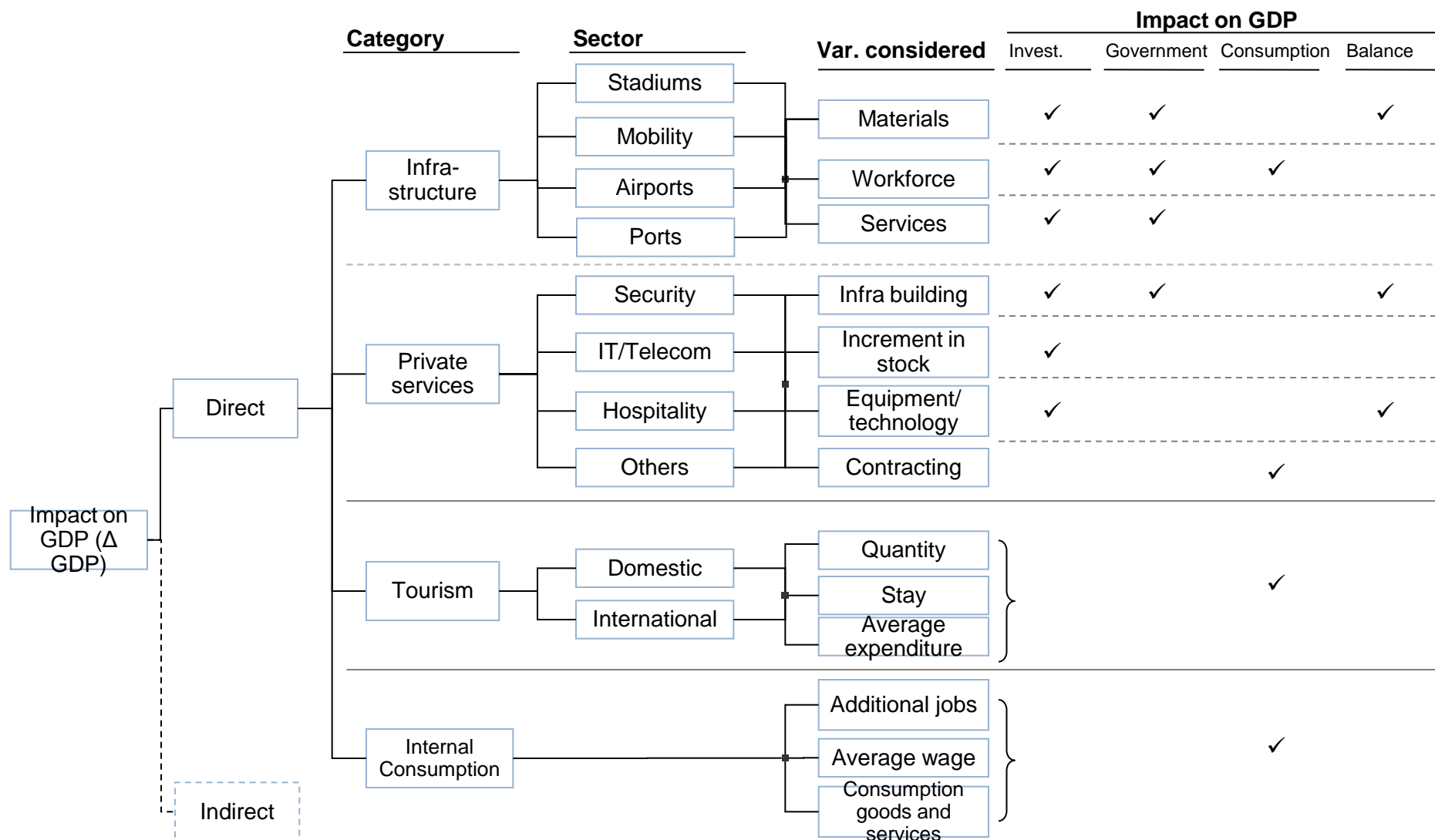


Material facts on the economic impact assessment

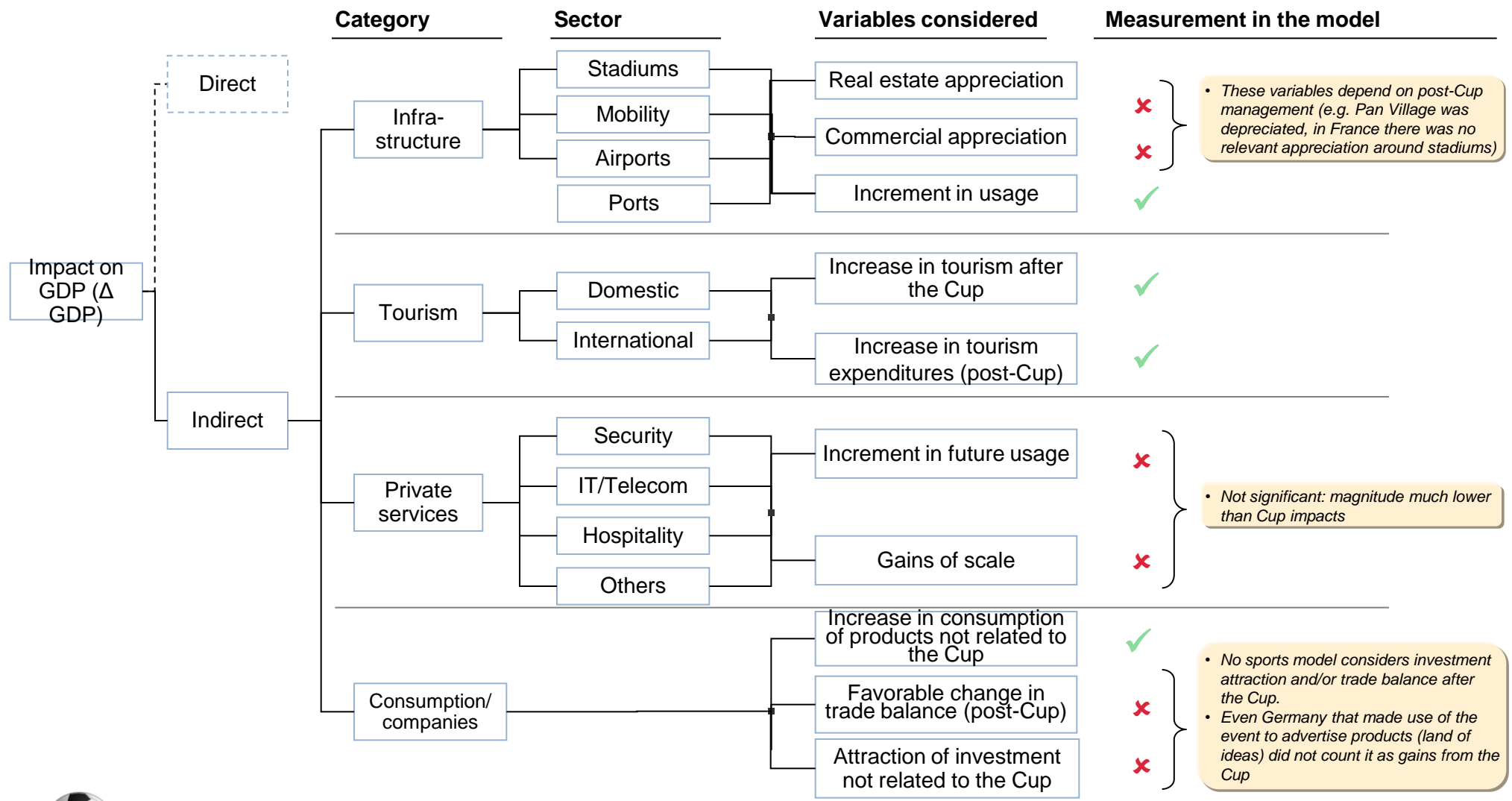
- The commissioned consultants prepared this **assessment in a totally independent fashion**
- Economic-financial analyses were performed with **information provided by the Government and information relative to other World Cups**. The commissioned consultants have not **audited** the data.
- Information used had **different sources and accuracy**:
 - **Responsibility matrix of host cities**, signed by Mayors, Governors and the Federal Government
 - Figures disclosed by the Ministry of Tourism relative to the sector
 - Release of the **country's economic figures** (GDP, jobs, average wages, ...), based on different macroeconomic reports (FGV, Ipeadata, IMF, FIP, COPON...)
 - **Econometric models** of previous World Cups (2010, 2006 and 2002)
 - Assessment of required investments performed by civil associations (ABDIB, etc...)
- **Information from globally recognized sources** were used:
 - Handbook on the Economic of Sports
 - ABDIB reports
 - Predicting the economic impact of the 2010 FIFA World Cup on South Africa
 - What does Germany expect to gain from hosting the 2006 Football World Cup; Macroeconomic and Regional economic Effects
 - Economic Impact of the Korea and Japan World Cup
 - France and The 1998 World Cup – The Nation Impact of word sporting Event



Logic tree for understanding direct impacts



Logic tree for understanding indirect impacts



Methodology for assessment of economic impact



Estimate of direct impact on the economy

- Identification of set-up investments (e.g. infrastructure) and event management (impact key)
- Identification of visitors' expenses, while in Brazil...
- ... and increased consumption resulting from job generation (another direct impact)

Estimate of indirect and induced impact

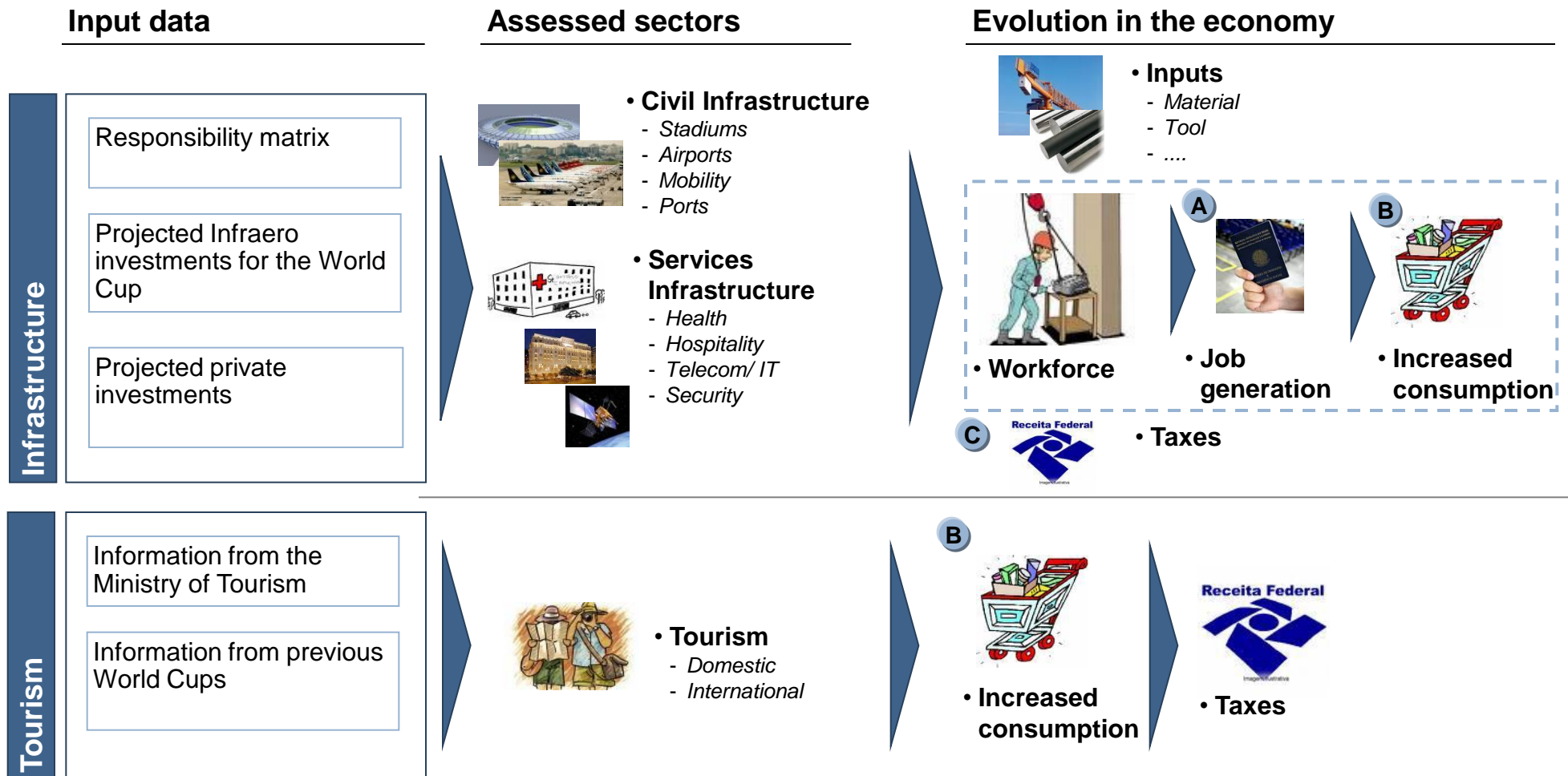
- Details of the methodological approach in which the indirect impacts induced in the economy are estimated
- Estimate of multipliers to calculate the impact
- Calculation of future demand
 - Stadiums
 - Tourism

Estimate of total impact

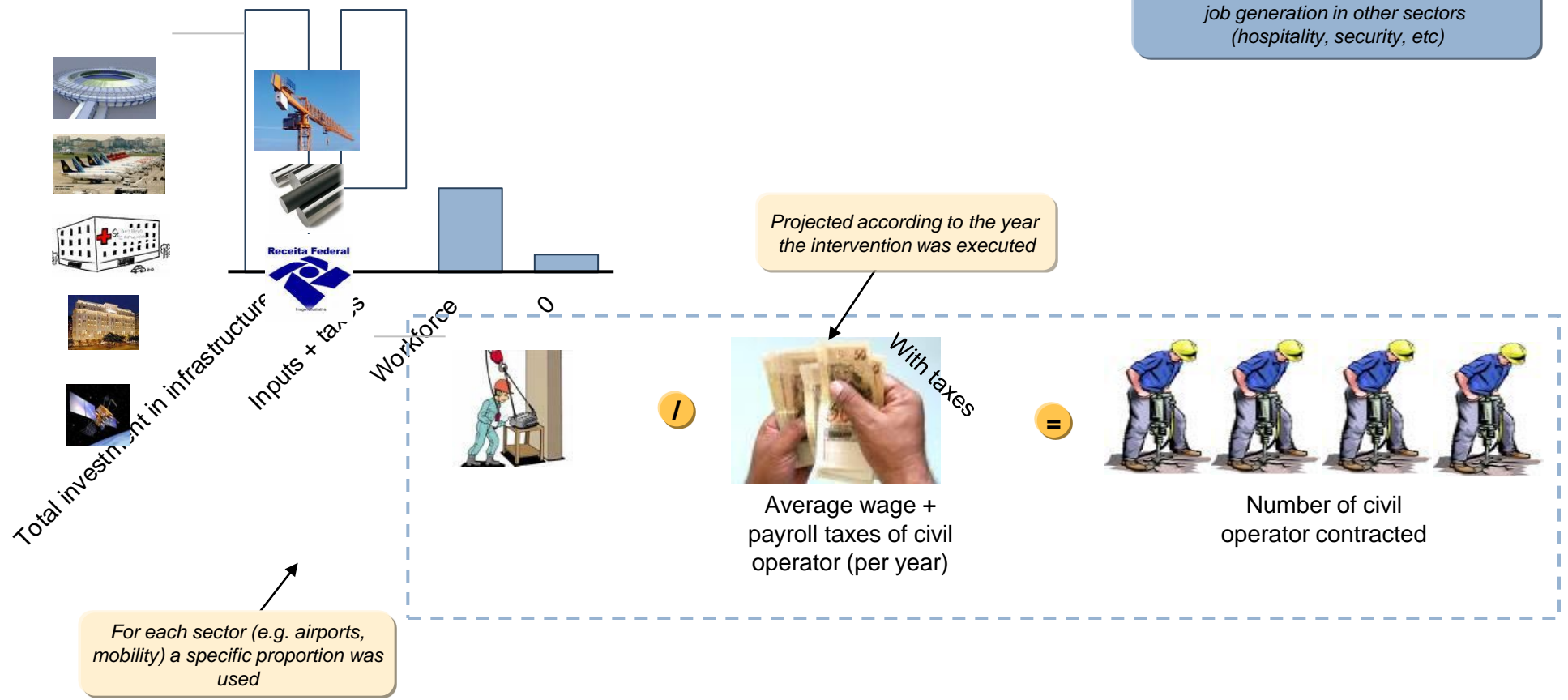
- Results of analyses



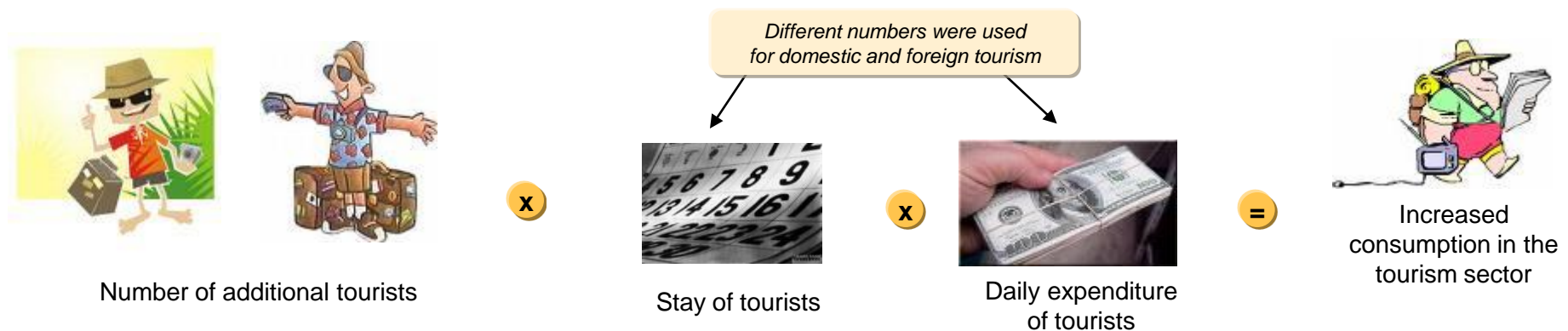
Direct impact is the result of the evolution of investments in interventions and the number of tourists attending the event



A Direct Impact: Methodology to estimate job generation (e.g. permanent jobs in civil construction)

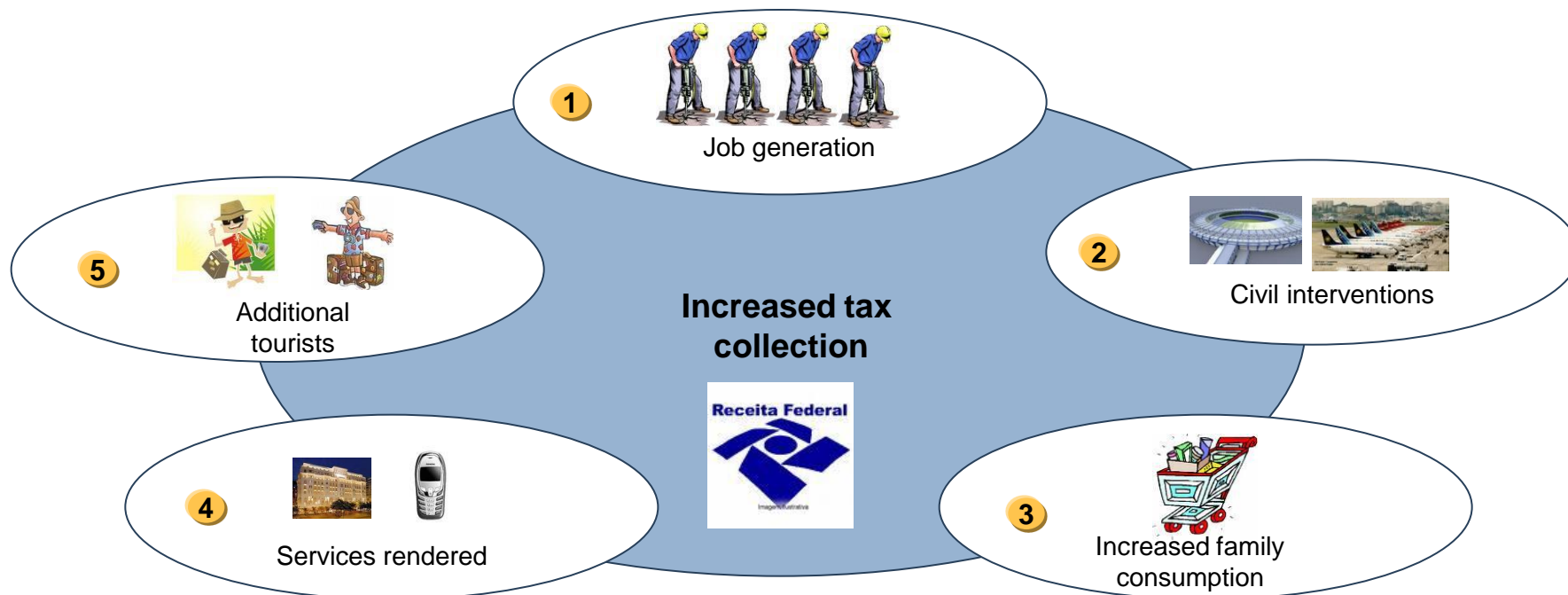


B Direct Impact: Methodology to estimate increased consumption



* Total cost with workforce
 ** Includes savings and FGTS (Government Severance Indemnity Fund)

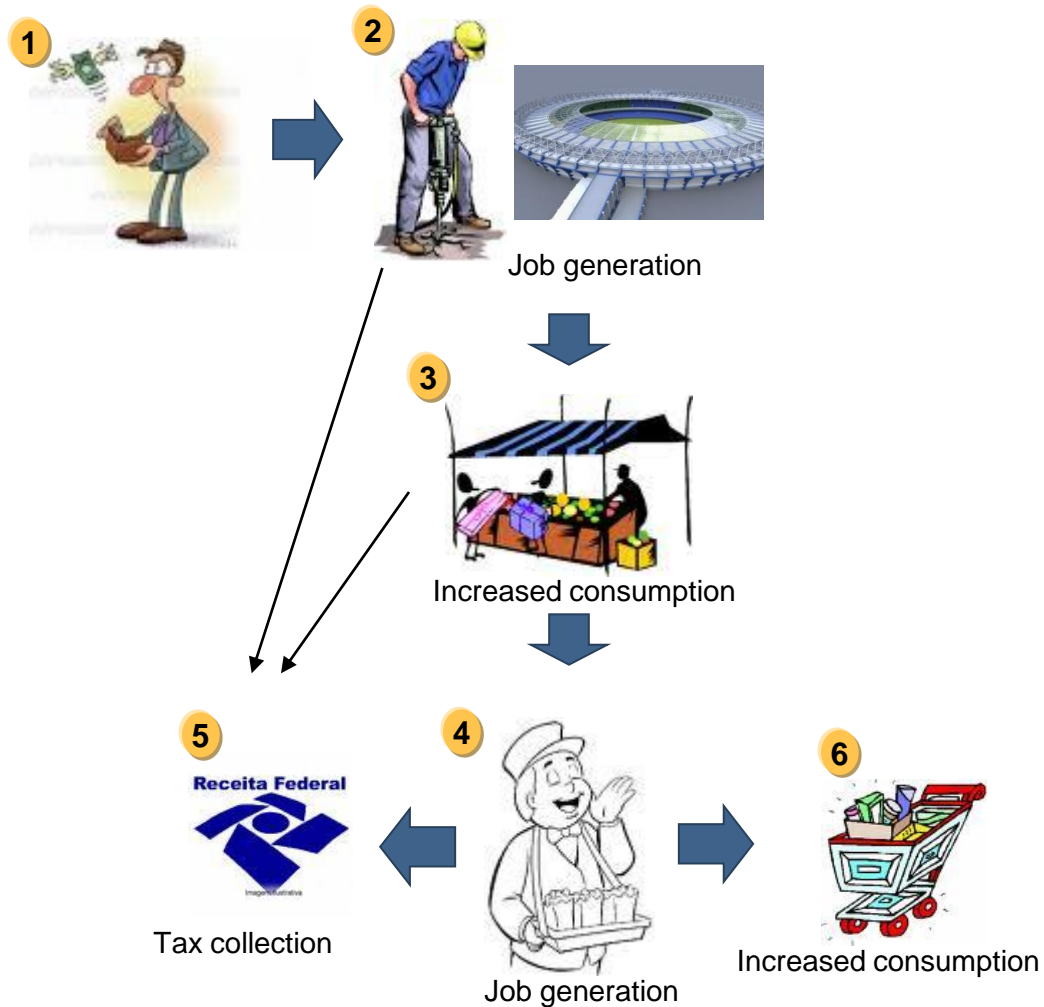
C Direct Impact: Methodology to estimate increased tax collection



- 1** Payment of income tax and contribution on revenues
- 2** Taxes collected on services rendered
- 3** Taxes collected on product manufacturing/circulation (ICMS and others)
- 4** Taxes collected on services rendered (ISS and others)
- 5** Taxes on increased tourist consumption



Indirect impact results from money “recirculation” in the economy



Indirect impact was measured as sector-specific “recirculation multipliers”, as observed in previous World Cups

Data used

- Multiplying effects are observed particularly in **3 economic sectors: Infrastructure, consumption and tourism**
- Multipliers applied to direct impact are **calculated through a statistical model**, specific for sporting events

Multiples

• Infrastructure:

Multiplier **x** 2.67

- Impact on the economy resulting from investment in infrastructure to host the event

• Consumption*:

Multiplier **x** 1.44

- Increased consumption generated by new family income

• Tourism:

Multiplier **x** 3.75

- Goods and services with production activated by increased tourism

• Jobs:

~15 new jobs for each US\$ 550 thousand of direct impact

Sources used



Handbook on the economics of sport – Wladimir Andreff, Stefan Szymastic



Predicting the economic impact of the 2010 FIFA World Cup on South Africa



What does Germany expect to gain from hosting the 2006 Football World Cup; Macroeconomic and Regional economic Effects



Economic Impact of the Korea and Japan World Cup



France and The 1998 World Cup – The National Impact of a World Sporting

* First round of circulation (multiplier) was considered as part of direct consumption, therefore the multiplier is only 1.44

Source: Handbook on the economics of sport ; Predicting the economic impact of the 2010 FIFA World Cup on South Africa; Economic Impact of the Korea and Japan World Cup; What does Germany expect to gain from hosting the 2006 Football World Cup; Macroeconomic and Regional economic Effects – Germany World Cup

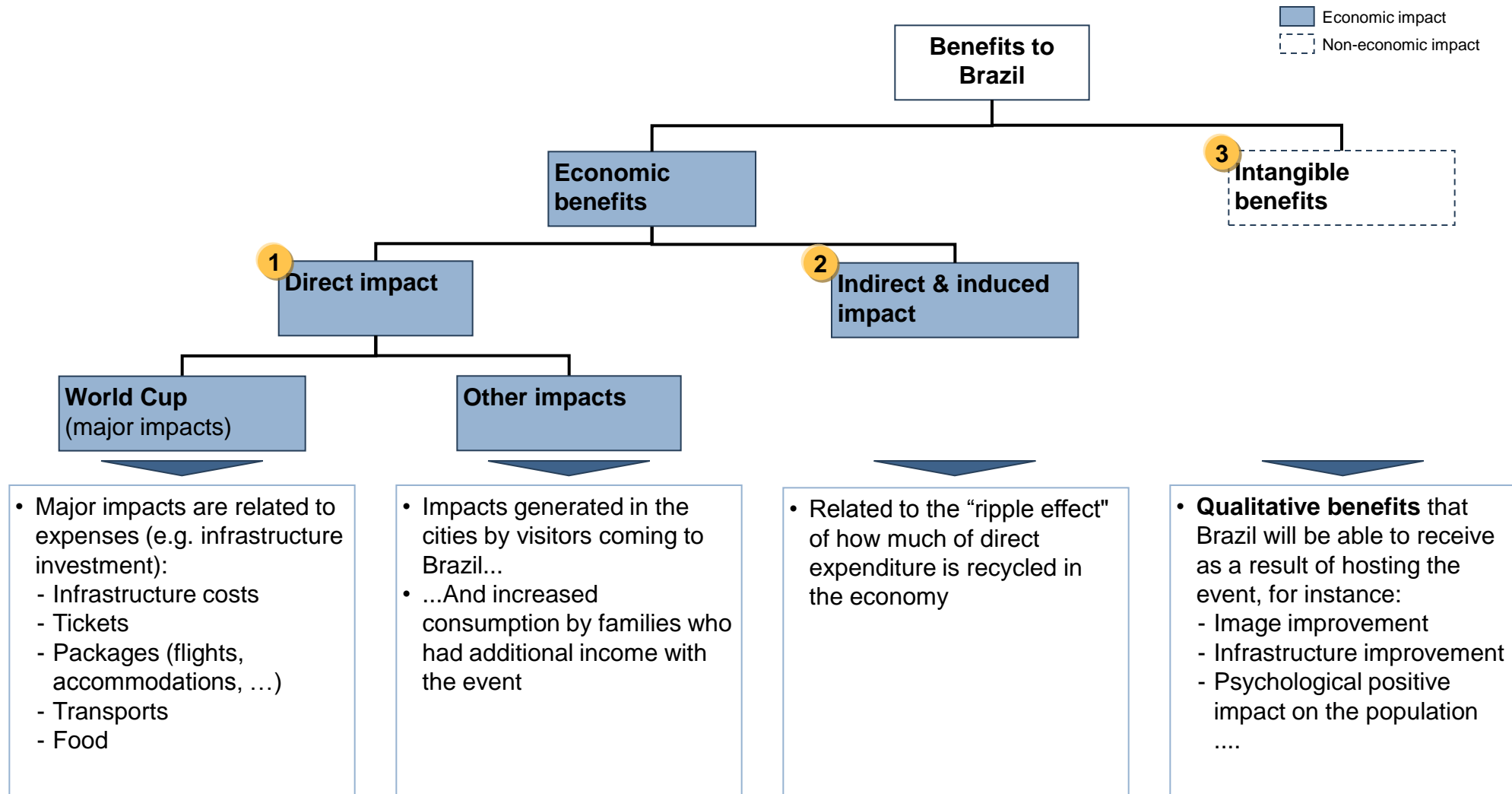


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- **Economic impacts of the World Cup in Brazil**

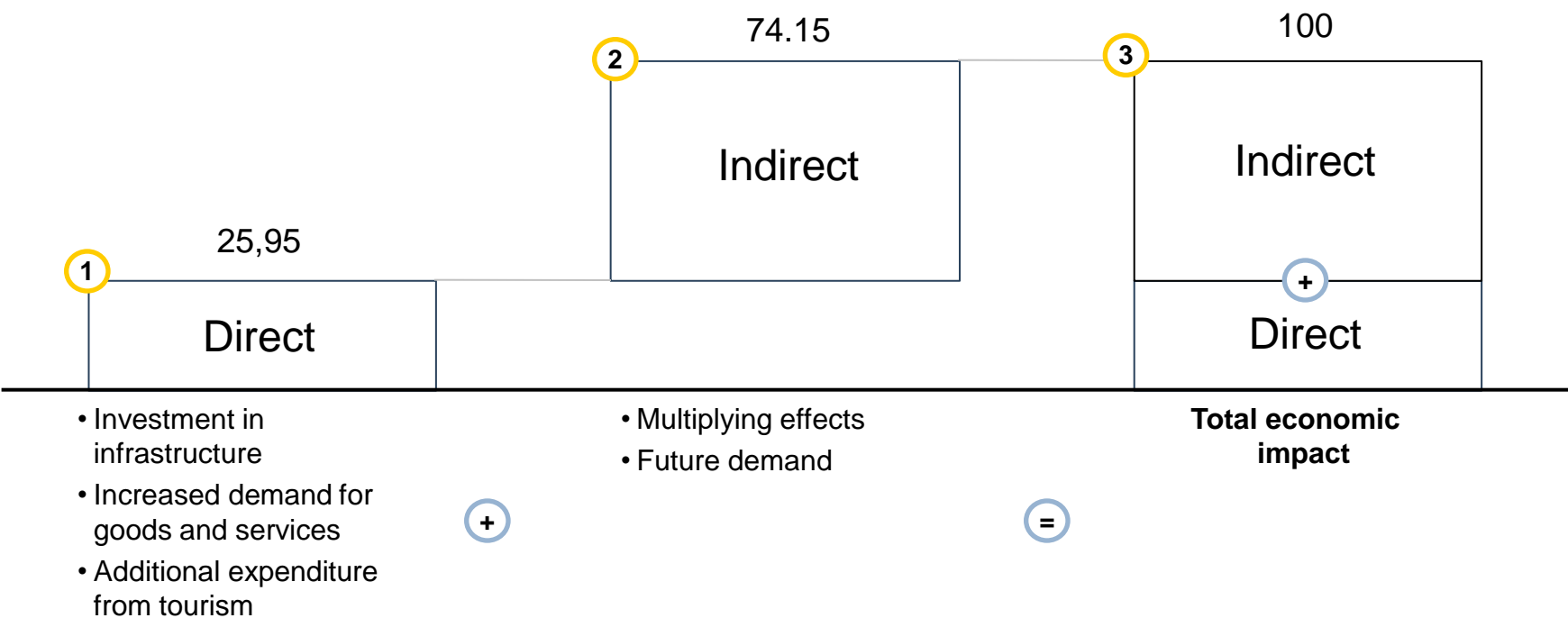


Part of the World Cup benefits are tangible and can have their impact on the economy measured in a material way



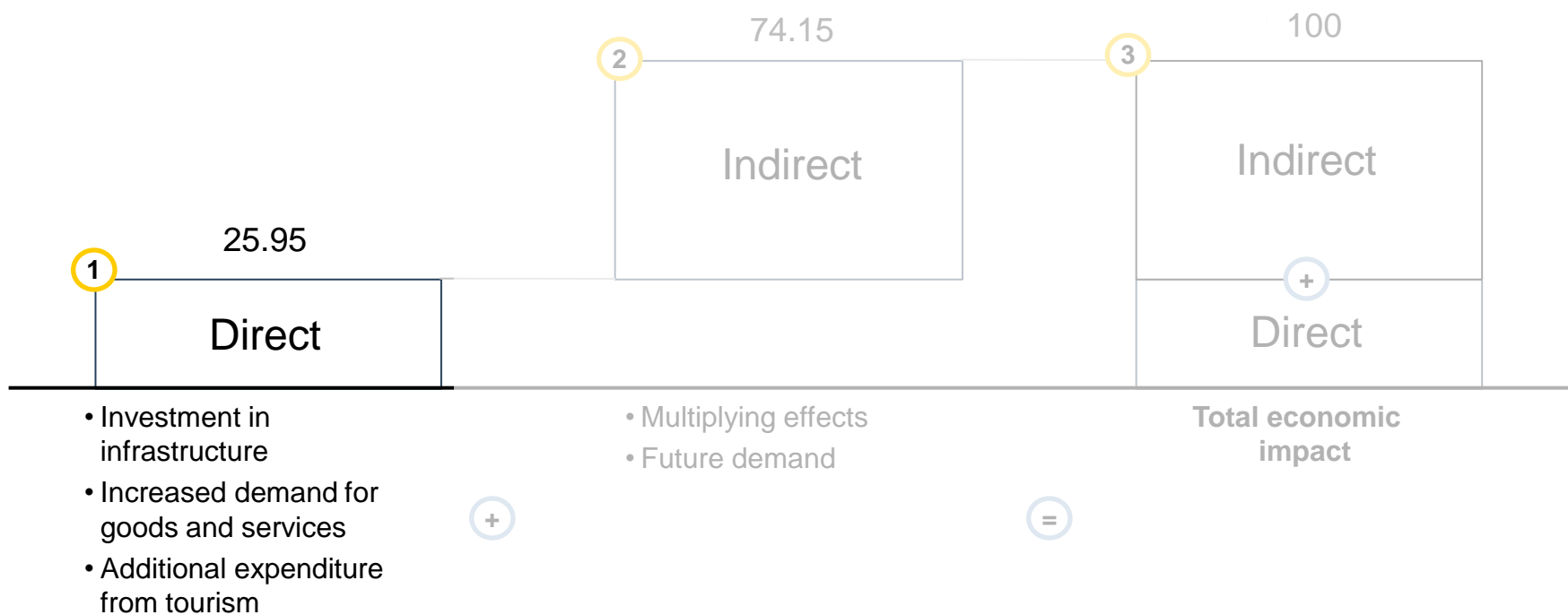
The World Cup will impact by ~US\$ 100 Billion the Brazilian economy

US\$ Billion

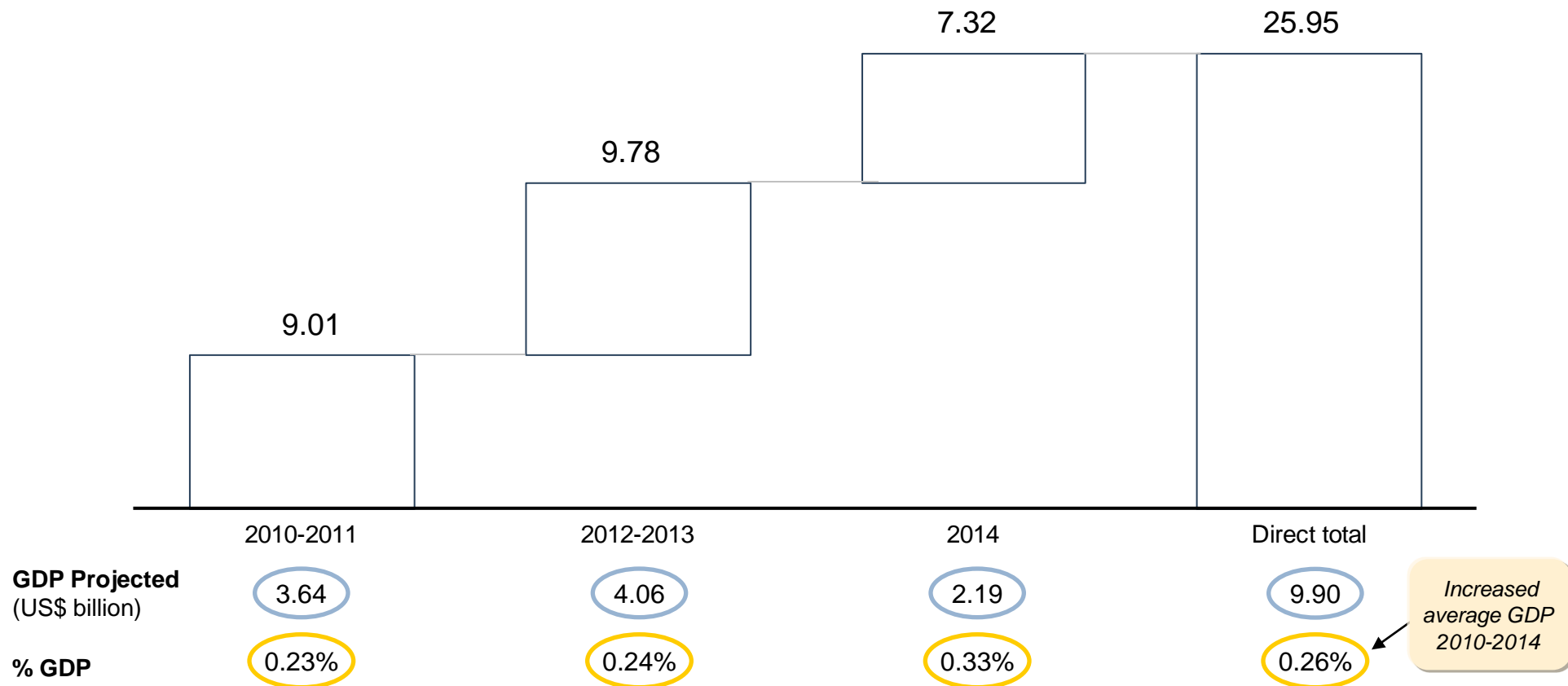


1 Direct Impact

US\$ Billion

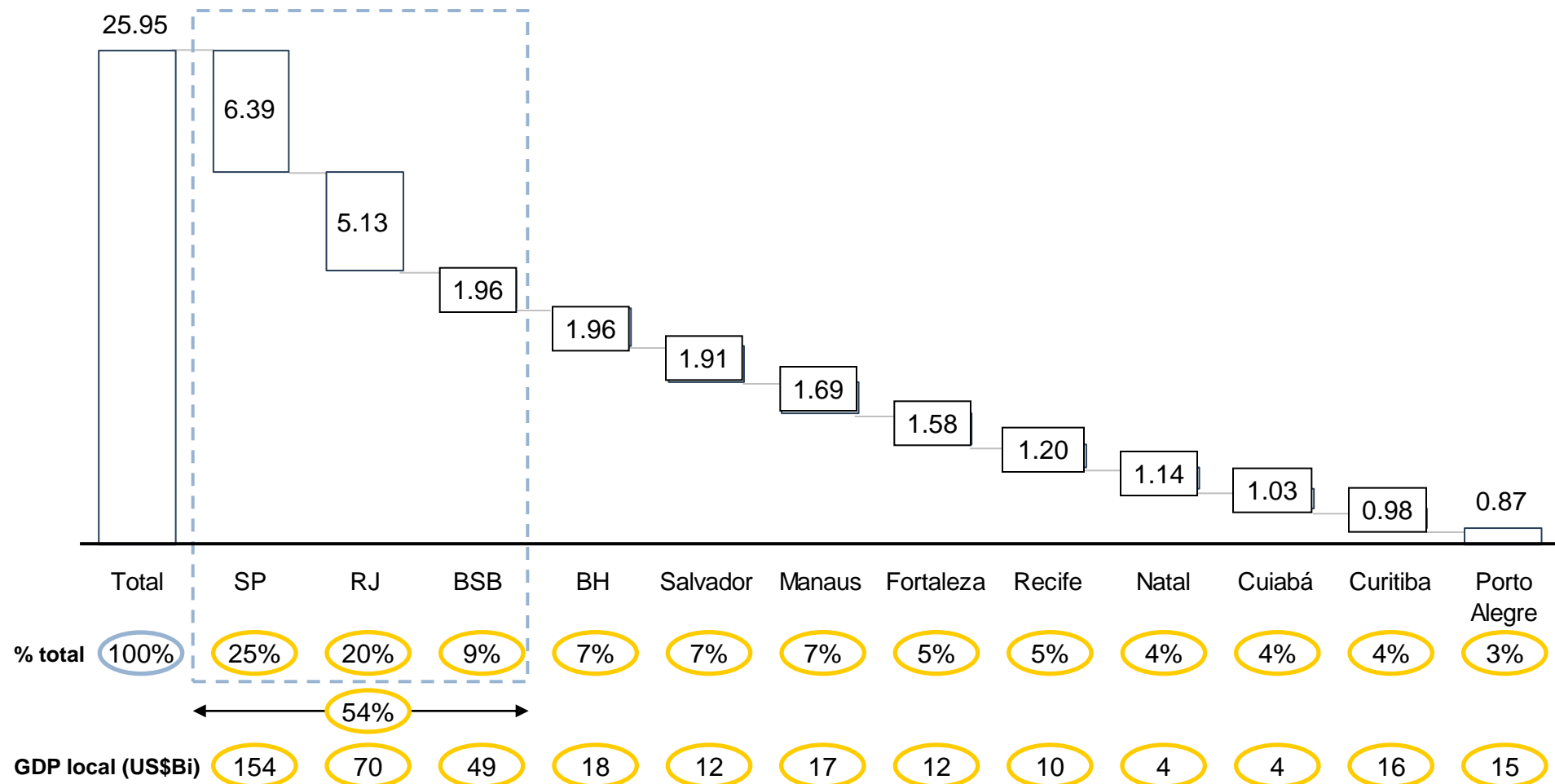


1 The World Cup in Brazil will impact the Brazilian economy directly by ~US\$ 25.9 billion (0.26% of average GDP) over the period 2010-2014...


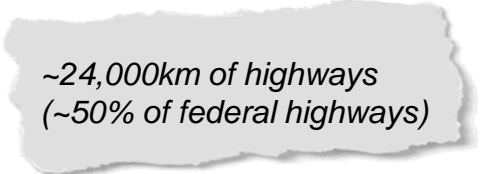



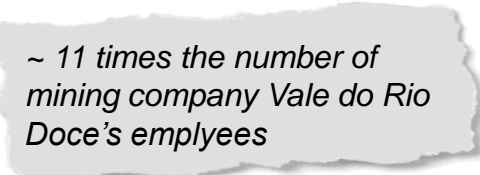



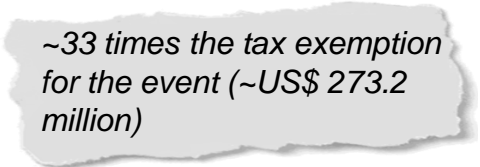


1 ... and São Paulo, Rio de Janeiro and Brasília (71% of total host-cities GDP) represent ~54% of total direct impact

US\$ Billion; %



1 The World Cup direct economic benefits are the result of growth in a number of components in the country

Sectors		Impact	Equivalent to:
<div>A</div> 	• Infrastructure <ul style="list-style-type: none"> - Stadiums - Airports - Mobility - Others 	<ul style="list-style-type: none"> • Civil: US\$ 12.56 billion • Services: US\$ 5.46 billion 	 <p>~24,000km of highways (~50% of federal highways)</p>
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	<div>D</div> 	• Consumption <ul style="list-style-type: none"> • Increment in consumption: US\$ 2.73 bi (2009-2014) 	 <p>~ 1.3 year selling refrigerators in Brazil (7.2 million)</p>
	<div>E</div> 	• Taxes <ul style="list-style-type: none"> • Total taxes: US\$ 9.18 bi • Federal taxes: US\$ 5.79 bi (63%) 	 <p>~33 times the tax exemption for the event (~US\$ 273.2 million)</p>



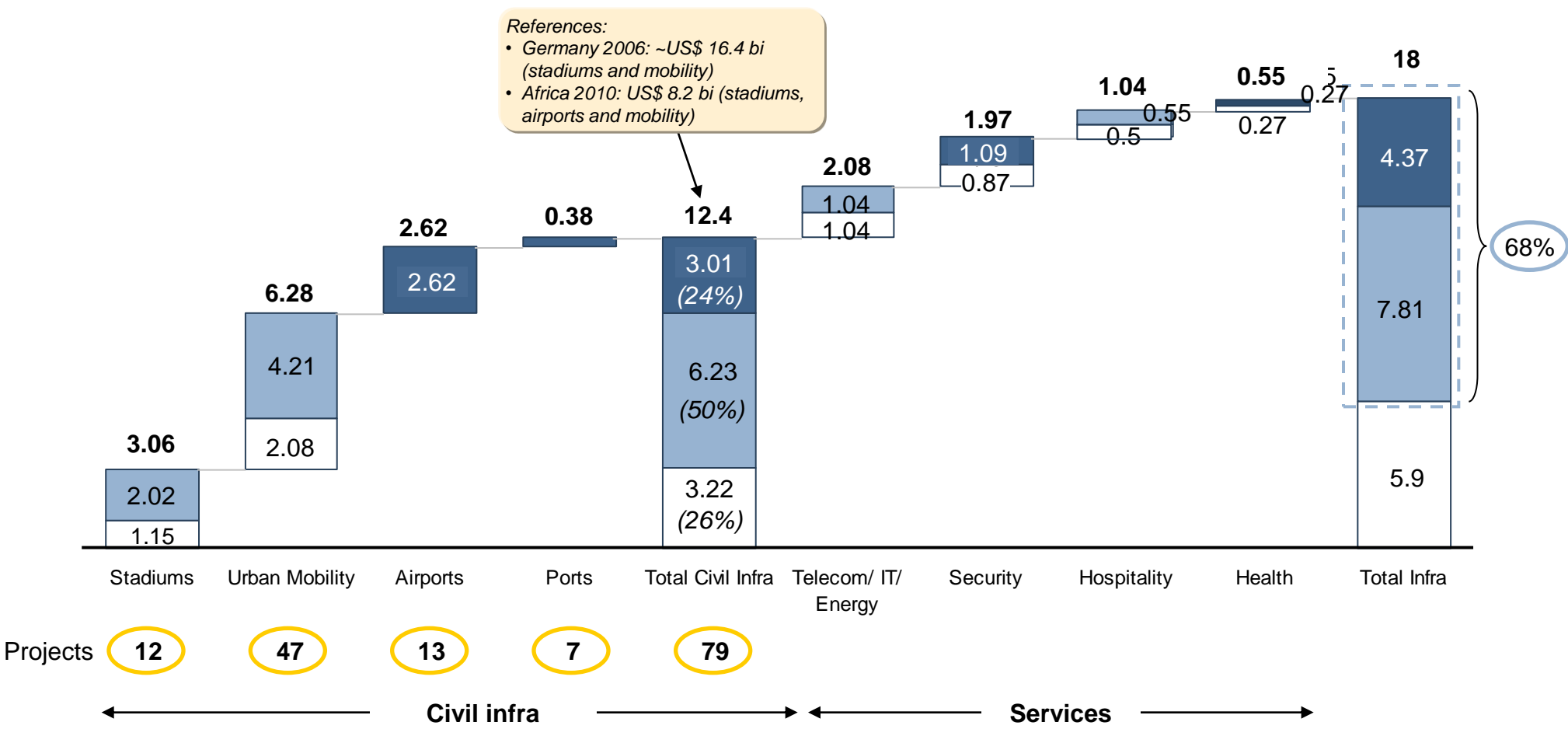


1 For the event, US\$ 18 billion will be invested in infrastructure, with 68% share from Federal Government

A INFRASTRUCTURE

US\$ Billion

Local Resources/Private
Federal Financing
General Federal Budget

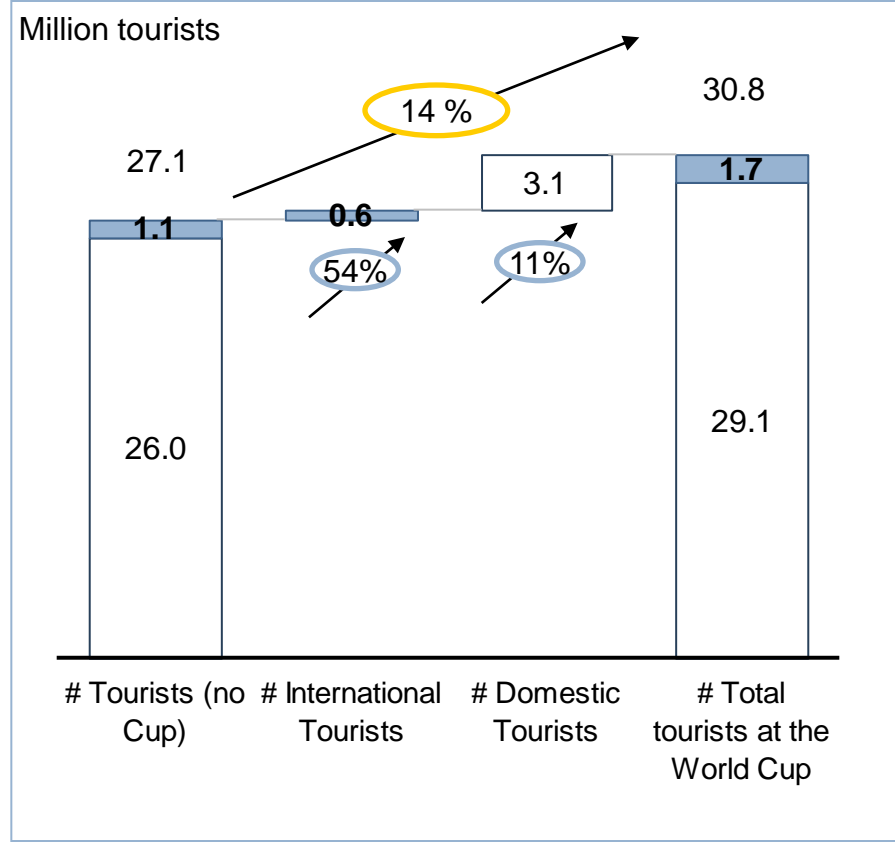




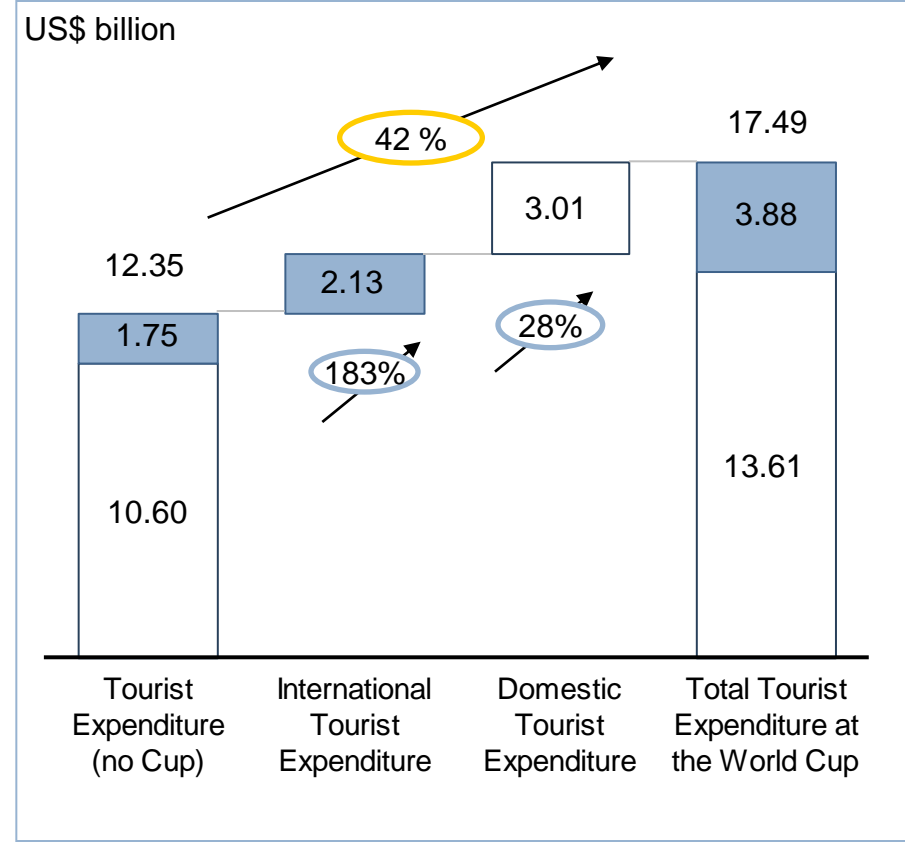
1 During the event, 3.7 million additional tourists are expected (~14% growth), adding US\$ 5.14 billion to the economy (~42 % growth)

June - July 2014

The number of tourists will grow by ~14% during the World Cup period (~60 days)...



... driving a ~42% growth in tourist expenditures



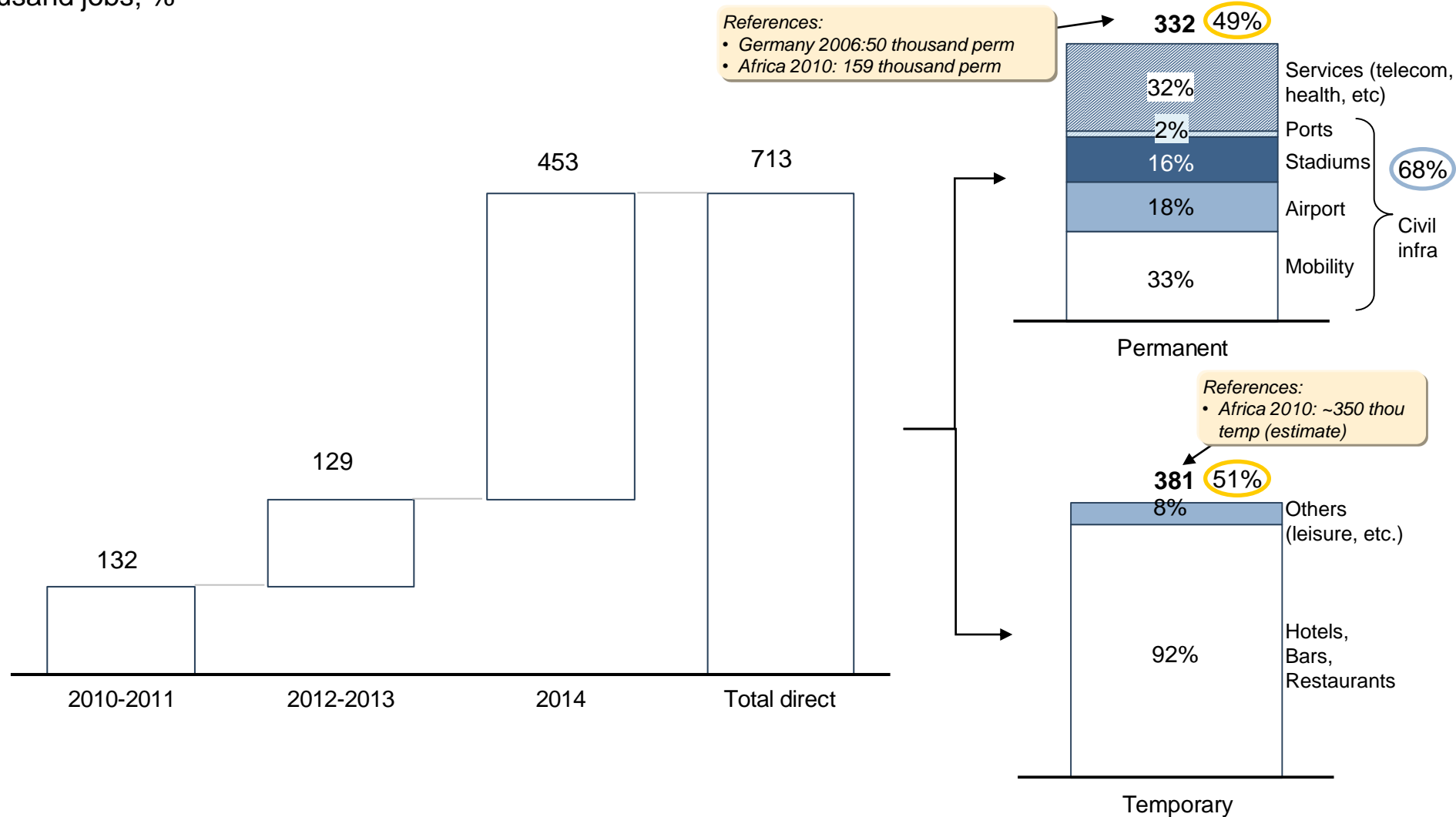
* Considering a World Cup factor that makes tourists spend more (source: Germany Benchmark)



1 ~737.8 thousand new job posts will be added (49% permanent and 51% temporary)...

C

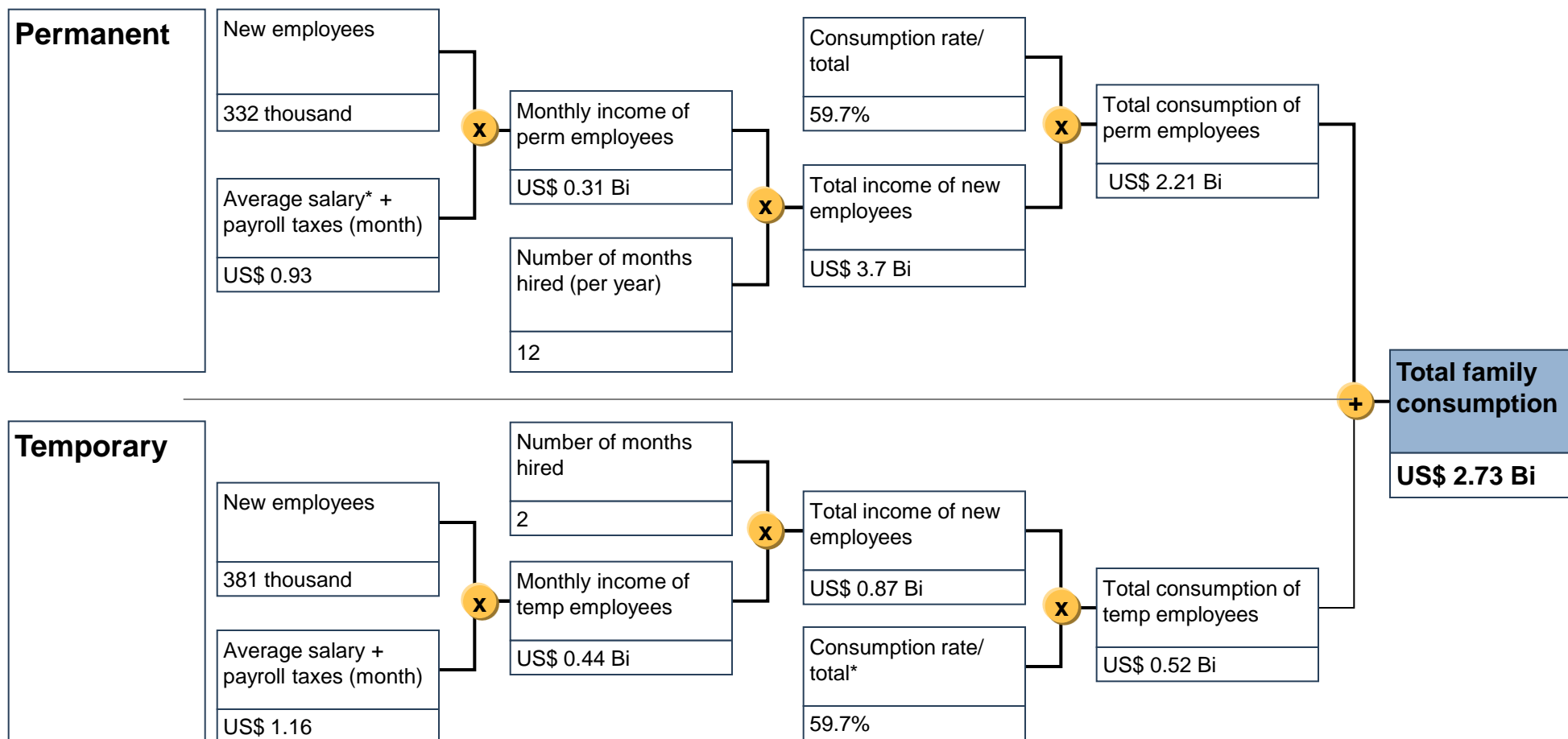
Thousand jobs; %





1

... resulting in a ~US\$ 2.73 Bi growth in family consumption

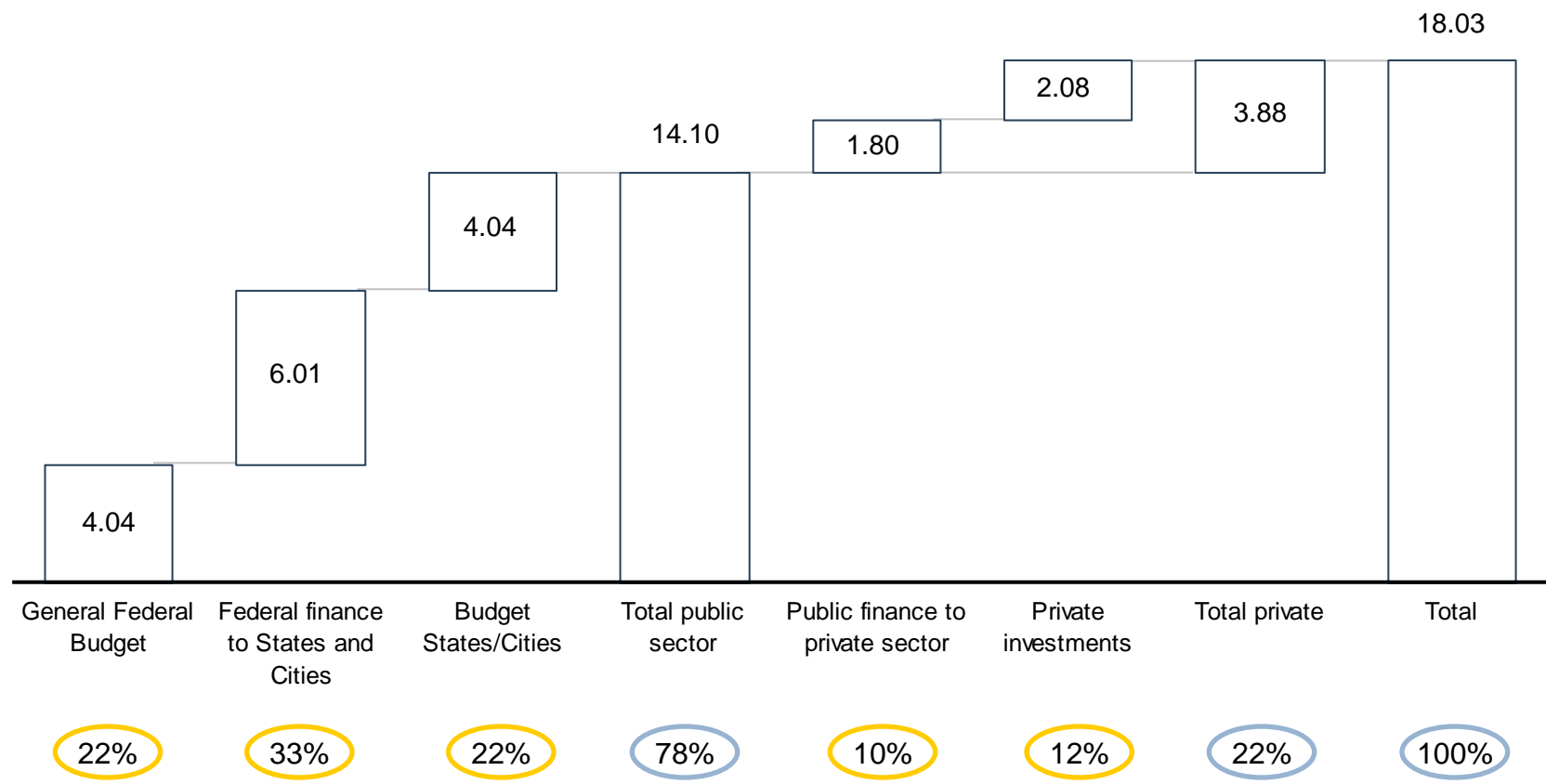
D CONSUMPTION


* Not considering import + salary savings + payroll tax savings

 Ministry
of Sport


1 ~78% of 2014 World Cup investments in infrastructure will originate in the public sector

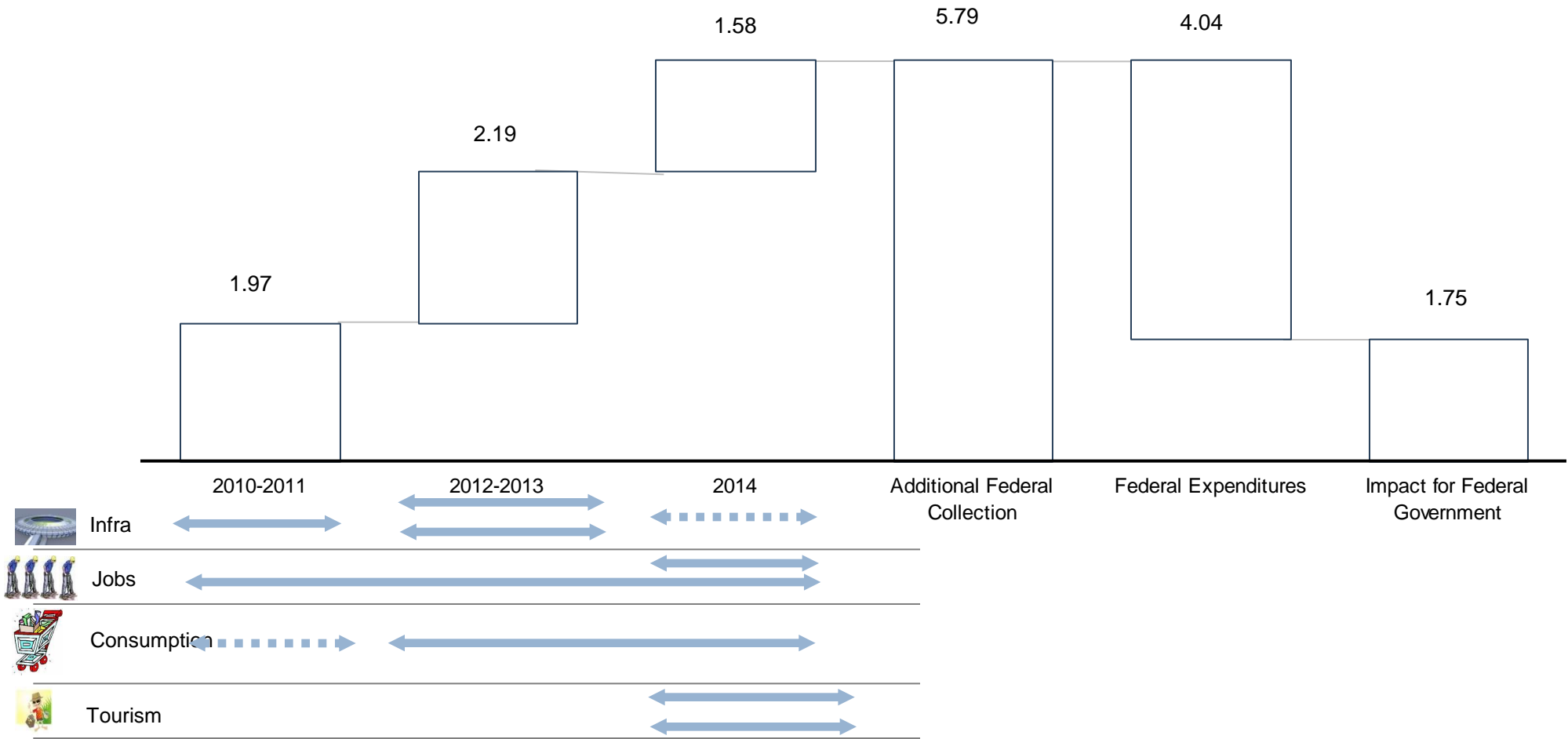
US\$ Billion



~US\$ 6 billion in federal taxes will be collected by 2014, generating a net return of US\$ 1.75 billion to Federal Government

US\$ Billion in federal taxes; %

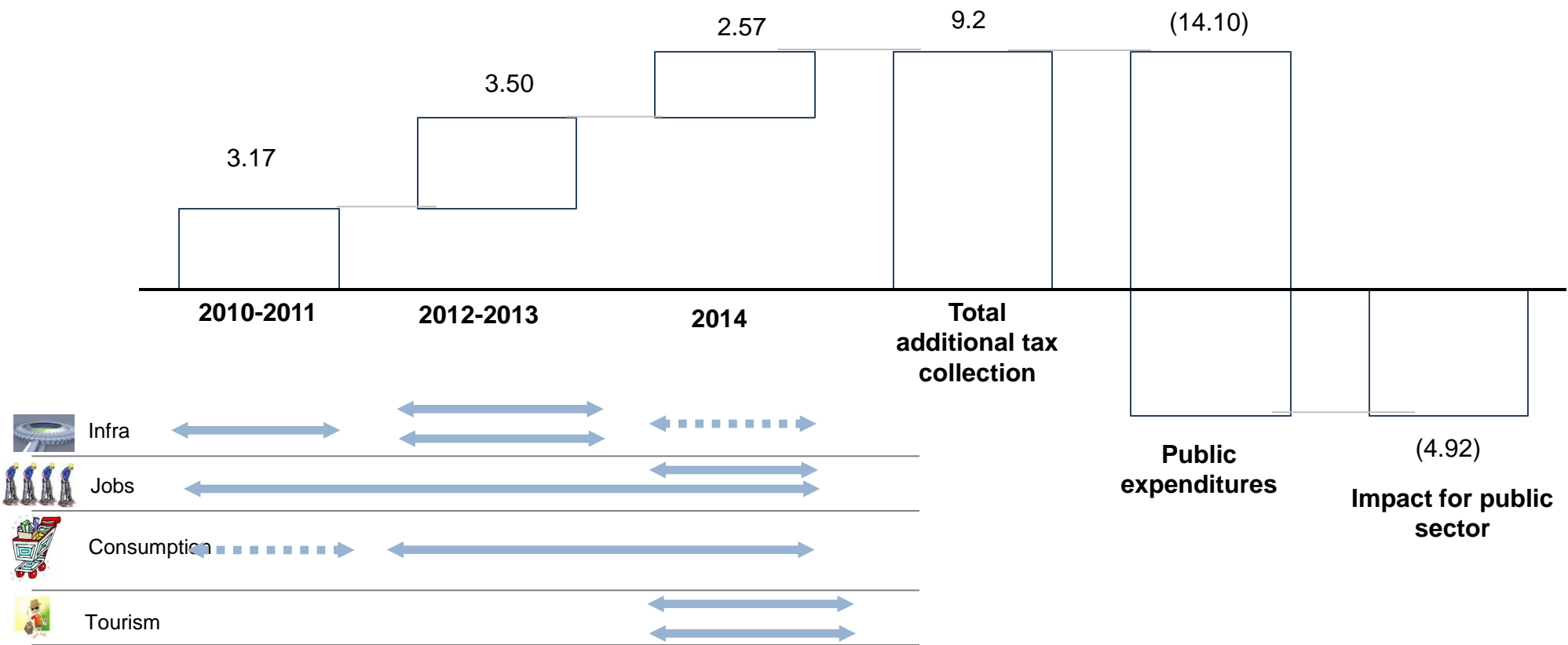
Strong collection
Low/ mid collection



1 ~US\$ 9.2 billion will be collected as taxes by 2014, covering 66% of government expenditures

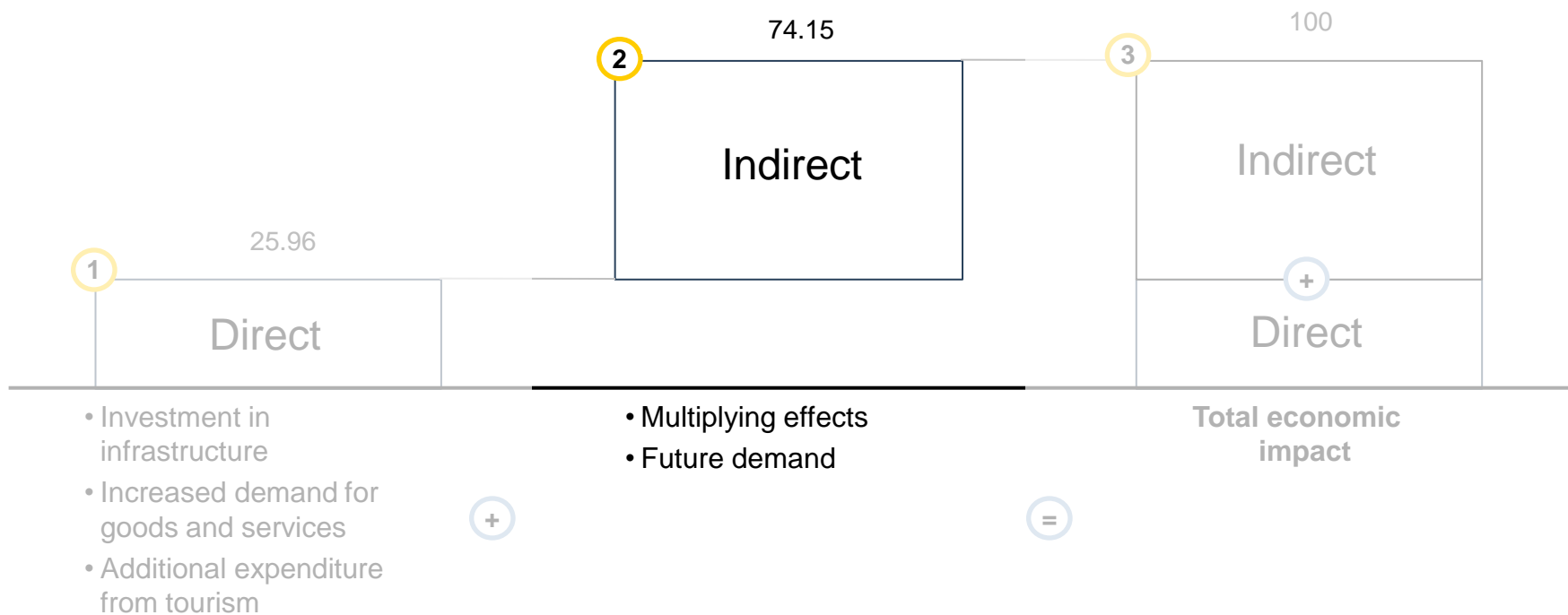
US\$ Billion in total taxes; %

Strong collection
Low/ mid collection



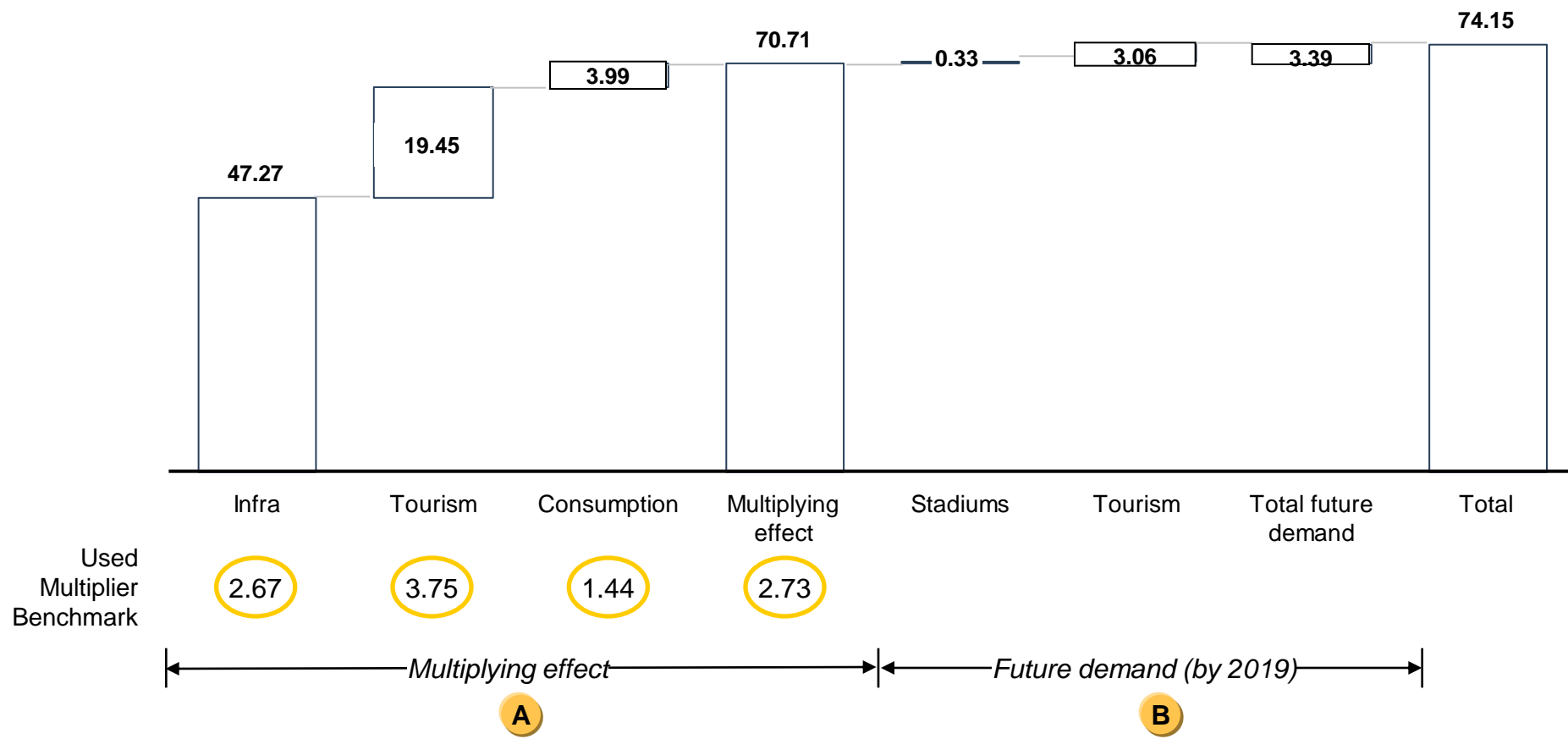
1 Indirect Impact

US\$ Billion



The 2014 World Cup will indirectly impact the Brazilian GDP by ~74 billion

US\$ Billion; %



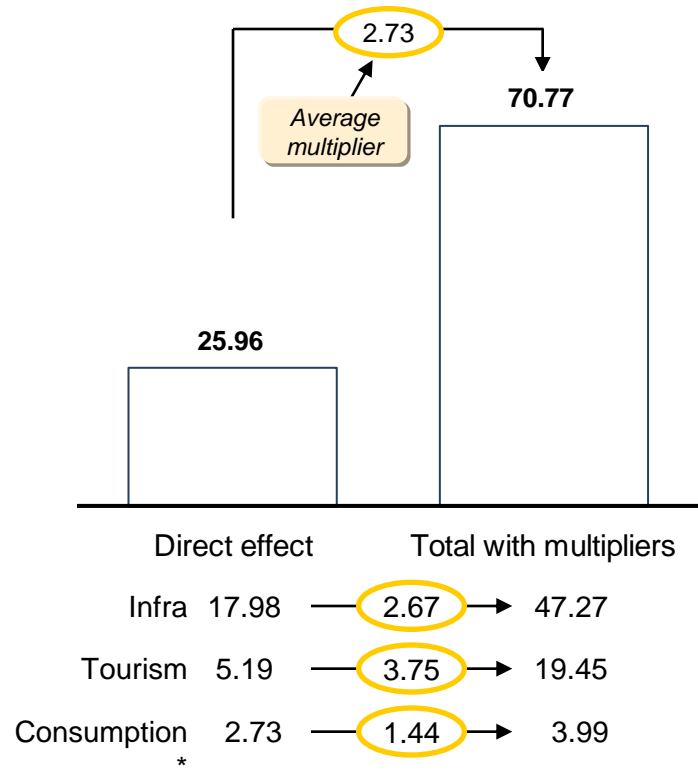
A For the calculation, the concept of multipliers has been applied (US\$ 53.93 Bi)...

US\$ Billion

Methodology applied

- Upon applying the methodology, the following were considered:
- Time span a little longer than direct effects
 - Stimulus to other sector economic activities **induced by direct effects**
 - Characterized by **money recirculation** in the economy
 - Used multiplier is **proportional to the amount circulated**

Economic Results



* First round of circulation (multiplier) was considered as part of direct consumption, therefore the multiplier is only 1.44

B ... together with the concept of future demand (~US\$ 3.72 Bi)

US\$ Billion

Methodology applied

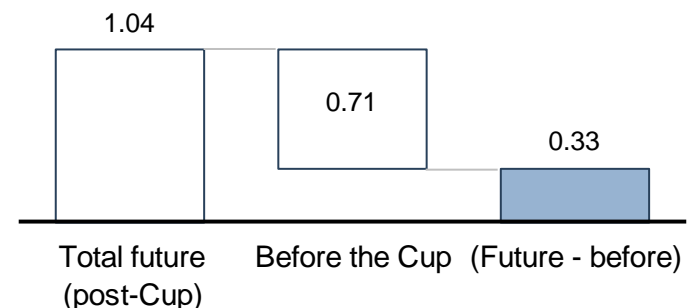
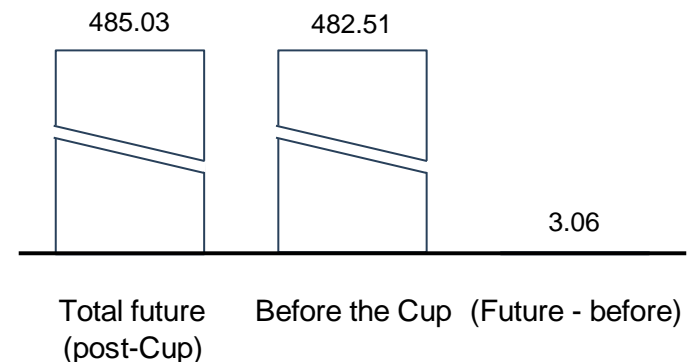
Tourism

- **Germany Benchmark** (Report from Ministry of Internal Affairs) pointed tourist indicator post-Cup:
 - Domestic: \uparrow 0.5%
 - International: \uparrow ~5.0%
- A so-called **Brazil factor** was added, taking into consideration:
 - **Lower awareness** of Brazil as **international** destination
 - Estimated **GDP growth** higher than Germany's

Stadiums

- **Germany Benchmark** (Bundesliga) pointed demand indicators post-Cup:
 - **Tickets:** \uparrow 8%
 - **Attendance:** \uparrow 9%
- A so-called **Brazil factor** was also added, taking into consideration:
 - Infrastructure (pre-Cup) much **more precarious than Germany's**
 - **Larger penetration** of football in the population
 - Estimated **GDP growth** higher than Germany's

Economic Results - Demand by 2019



3 In addition to economic impact, there are a number of intangible benefits that should also be taken into consideration

International visibility

- Change in the **Brazilian image abroad**:
 - Strengthening of the image as a **joyful, friendly country**
 - Aggregation of new attributes to the Brazilian image: **competence, organization and development**
- Higher exposition for **products and services**, particularly those in which **Brazil has competitive advantages**
- Implementation and dissemination of **green technologies (fuels, building, ...)**

Tourism

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- Dissemination of **regional tourist attractions and increase of domestic tourism**, especially still unexploited destinations
- **Qualitative leap** in services connected to the sector (hospitality, food, taxis, ...):

Infrastructure

- Improvement in the **quality of services/ life quality** for the population:
 - **Modern technologies** in transports
 - Increased **comfort at stadiums**
- Platform for **productivity gains** in the private sector
- Creation of **new centers/vectors** of development

Institutional improvement

- Improvement in **public management control**
- Increased **integration between Brazilian regions**
- Strengthening of the **national pride** (being Brazilian)

