Associazione delle organizzazioni di ingegneria, di architettura e di consulenza tecnico-economica

CONFINDUSTRIA

Report on the Foreign Activities of Italian Engineering, Architectural and Consultancy Companies

2021

Ministero degli Affari Esteri e della Cooperazione Internazionale

ITALIAN TRADE AGENCY

ICE - Agenzia per la promozione all'estero e l'internazionalizzazione delle imprese italiane

CENTRO EUROPA RICERCHE

Association of Italian Engineering, Architectural, and Technical-Economic Consulting Organizations

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and Technical-Economic Consulting Organizations

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OICE is the employers' Association, belonging to Confindustria (the Confederation of Italian Industry), which represents Italian engineering, architectural and technical economic consulting organizations.
Founded in 1965 OICE unites all the major Italian engineering companies and most of the best qualified small and medium firms in the industry. OICE operates in 4 major areas: representing and safeguarding category interests, promoting the culture of organized engineering, providing services for members and promoting internationalization of Italian Engineering. OICE is member of FIDIC – International Federation of Consulting Engineers and EFCA – European Federation of Engineering Consultancy Associations. OICE participates to the international activities and Italian Institutional missions, promotes special partnerships with the engineering Associations, sustains the participation of the Italian Consulting companies to the tenders organized by the International Financial Institutions.

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Using the most modern multi-channel promotion and communication tools, it acts to assert the excellence of Made in Italy in the world.

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INTRODUCTION

Roberto Carpaneto – OICE's Vicepresident for International Affairs

Our companies, when world's challenges look out, show their best characteristics and strength. We all call it resilience now after almost two years of COVID and relevant economy impacts.
In spite of an expected (we foreseen it last years) decrease of the "quantity" of our services abroad we have seen, and we continue to observe in 2021, a better "quality" of our services and a greater market share in many areas for our engineering, architecture and consultancy companies.

It is a great result of the common effort of the companies and, let me think so, of OICE's continuous attempt to help them in developing activities in the international market.

Our companies in the ENR 2020 (top 225 International Design Firms ranking) are one of the most numerous groups in the world: after USA and China: Italy has 12 companies in the best performing 225 companies in the world. We need to increase our volume of activities, but this is an excellent achievement.

The figures presented in this report show that, in addition to the infrastructural sector, we contribute abroad in the energy, transportation and ICT sectors and we are adding values to the significant expansion of the green infrastructure market, the energy transition market and the large digital transformation process.

During 2020 more than 57 percent of our activities was performed in the International market, but mainly medium to large companies, among the cluster included in this survey, were really able to continue and eventually increase the activities abroad. We need to work and help small companies to start and maintain their international presence increasing opportunities and helping to form consortium and common presences in target countries.

The large number of interactions with Italian and foreign Authorities and institution dedicated to the development of the commercial market including Italian companies seems to have significant results compared to previous "old" periods. The activities of our engineering, architecture and consultancy companies are now fully recognized as a powerful step for the promotion and success of the entire Italian value chain. As OICE we have worked hard to achieve this positioning and we are convinced that this is the right direction to increase the recognition of our contribution to project development and to the Italian industry presence in the world.

Chapter 1. INTERNATIONAL OUTLOOK

• The Macro-economic context

Following a 3.5 percent contraction caused by the COVID-19 pandemic in 2020, global economic activity has gained significant impetus even if it remains well below pre-pandemic projections. The actual contraction was less severe than expected: global growth was indeed projected to decline by 4.4 percent in 2020. Moreover, the recovery is uneven, passing over many poorer countries, reflecting on one hand variation in pandemic-induced disruptions and on the other hand the extent of policy support. The overall economic outlook will depend on the outcome of vaccinations all over the world, but also on how effectively economic policies can limit lasting damages from this crisis.

According to the World Bank Global Economic Prospect published in June 2021, global growth is projected at 5.6 percent in 2021, its strongest post-recession pace in 80 years. Despite this pickup, the level of global GDP in 2021 is expected to be 3.2 percent below pre-pandemic projections and 1.8 percent in 2022.

Moreover, as said, the recovery is uneven as well as the vaccination progress, which is the key for this rebound together with the relaxation of pandemic-control measures. A substantial share of this recovery is due to major economies: China and the USA are expected to contribute over one-quarter of global growth in 2021.

In this framework, emerging markets and developing economies are expected to outperform advanced economies both in 2021 and in 2022 (+6.7% vs +5.1% in 2021 and +5.0% vs. +3.6% in 2022).

Global manufacturing has firmed, with industrial production surpassing its pre-pandemic level, whereas services activity remains soft.

Global financial conditions have tightened, reflecting a rise in U.S. bond yields caused by inflation pressures but remaining generally supportive and reflecting a continued policy accommodation by major central banks.

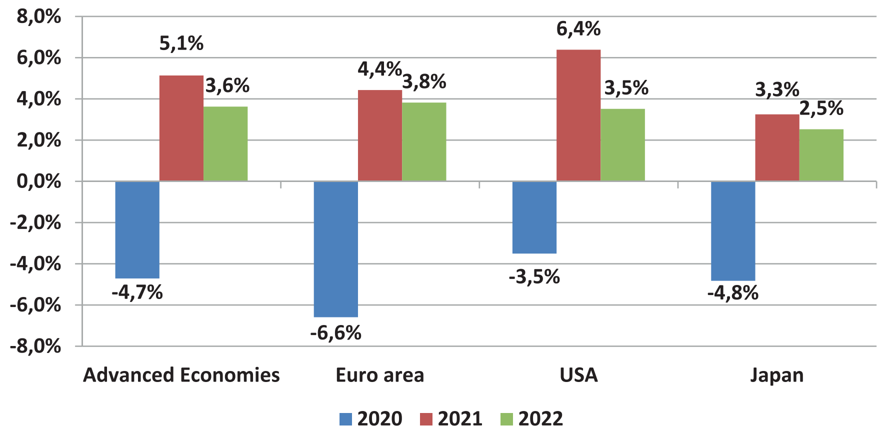
The recovery in global trade started earlier and has been stronger than that of other components of global output, as pandemic's impact has encouraged a shift in demand toward the consumption of durable goods, which have high trade intensity. In this scenario, as highlighted by the recent SACE's Rapporto Export, world trade in goods is expected to grow by around 10% in 2021 (+5% in 2022), while services are expected to grow by around 15% next year (stable in 2021).

Given this global macroeconomic scenario, figure 1 and figure 2 depict the GDP growth for advanced and emerging economies provided by the last World Economic Outlook of the IMF.

Advanced economies: following a 4.7% contraction, GDP is expected to rise by 5.1% in 2021, and to rise less in 2022 (+3.6%).

- USA: According to IMF estimates, after a quite strong contraction (-3.5%) in 2020, the gross domestic product of the USA is expected to rise by 6.4% in 2021 and by 3.5% in 2022, following the same path of the other advanced economies. IMF projects a further decline in the rate of unemployment (from an actual 8.1% in 2020 to an expected 5.8% in 2021 and 4.2% in 2022).
- Euro Area: IMF forecast foresee two years of growth, weaker in the second year. Real GDP is expected to rise by 4.4% in 2021 and by 3.8% in 2022. Unemployment is projected to rise by 8.0% in 2021, from a lower value of 7.1%, but expected to decline in the next year (7.8%).
- Japan: following the same path of the other countries, IMF projected a rise in real GDP by 3.3% in 2021, and 2.5% in 2022. IMF projects an almost irrelevant rise in the unemployment rate in 2021 (3.7% against an actual 3.6% in 2020). A further decline is expected in 2022 (3.3%).

Figure 1.1 Real GDP growth forecast, advanced economies



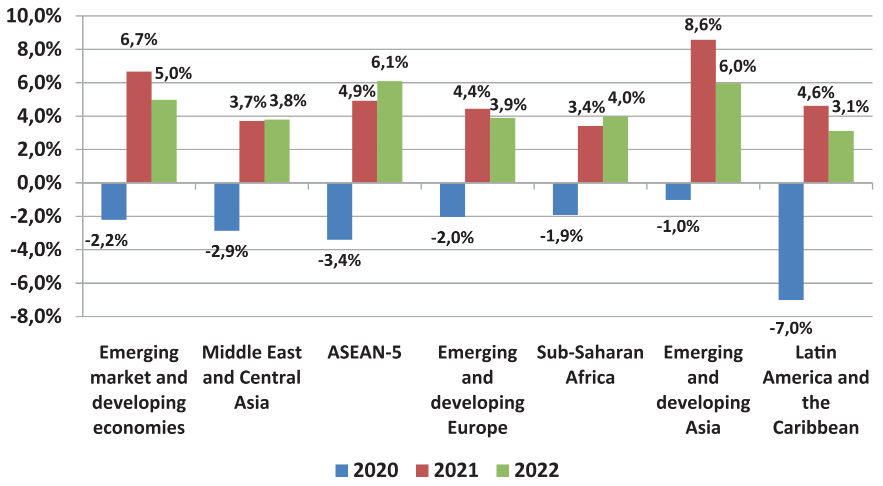
Source: elaboration on IMF data.

Emerging markets: GDP is expected to rise by 6.7% in 2021 and by 5.0% in 2022. The actual decline (-2.2%) in GDP was lower than the one IMF projected last year for 2020 (-3.3%). Also, the projection for 2021 are more optimistic than the last World Economic Outlook.

- Middle East and Central Asia: the IMF scenario estimates a rise in GDP in 2021 of 3.7%, after declining by 2,9% in 2020. The IMF estimates a further rise for the following year (+3.8%). Labor market conditions remained weak and uneven: data on unemployment rates points to persistently high levels. In the second half of 2020, after a peak in the first half of the same year. Fiscal accounts deteriorated across the region in 2020, reflecting lower revenue caused by the contraction of domestic demand, the slump of oil prices and policy support measures. As expected, oil exporters showed a larger deterioration than oil importers, because of lower revenue. Particularly, for the MENA region (Middle East and North Africa), fiscal deficit rose to 10.1% of GDP in 2020 from 3.8% in 2019 and for the CCA (Caucasus and Central Asia) fell to -5.6% of GDP from a surplus of 0.5% in 2019. It is also worth noting the rise of the government debt which has widened to 56.4% of GDP in 2020 for the MENA region (from a level of 47.6% in 2019) and to 33% for the CCA region (from 25.9%).

- Emerging and developing Asia: the expected decline in GDP for 2020 was 1.7% but the actual decrease was way lower (1.0%), the mildest compared to other areas in our analysis. The rebound expected in 2021 is 8.6%, upwards from the last projection (8%) and the largest with respect to other areas. Chinese economy grew by 2.3% in 2020, the only country which experienced a growth during the pandemic. IMF projected a rise in Chinese GDP by 8.4%in 2021 and by 5.6% by 2022.

Figure 1.2 Real GDP growth forecast, emerging and developing economies



Source: elaboration on IMF data.

- Emerging and developing Europe: last year IMF expected a strong GDP decrease in 2020, equals to -4,6%, but it drops only by 2.0%. Furthermore, IMF expects a rise by 4.4% in 2021 and by 3.9% in 2022, as the usual path followed by other countries.

Russian GDP declined by 3.1% in 2020 while a mild rebound is expected both in 2021 and 2022 (+3.8% for both years).

- Sub-Saharan Africa: Sub-Saharan African economy was expected to decline by 3.0% in 2020 but it only dropped by 1.9%. As the other group of countries, IMF expects a rise of 3.4% in 2021, and an even higher increase in 2022 (+4.0%).
- ASEAN-5: GDP declined by 3.4% in 2020, in line with last year IMF forecast. A growth is expected in 2021 for these countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), +4.9%, down from previous estimates and, according to IMF projection, a faster growth will follow in 2022 (+6.1%). The average unemployment rate (obtained by averaging the unemployment rates of Indonesia, Thailand, Vietnam, Malaysia, and

Philippines) was 5.5% in 2020 and the IMF projected a decline both for the 2021 and the 2022 (4.4% and 3.8%).

- Latin America and the Caribbean: after a projection of decrease by 8,1% in 2020, the economy of this area dropped by 7.0%, less than the forecast but still the worst scenario among all the analyzed macro areas. The recovery will not be fast: IMF expects a growth of 4.6% in 2021 and of 3.1% in 2022.

SOURCES:

- BIS, Annual Economic Report, June 2021
- International Monetary Fund, Regional Economic Outlook of Middle East, and Central Asia: *Arising from the Pandemic: Building Forward Better,* April 2021
- International Monetary Fund, World Economic Outlook, April 2021
- SACE, Rapporto Export 2021. Ritorno al futuro: anatomia di una ripresa post-pandemica, September 2021.

-World Bank, Global Economic Prospects, June 2021

• International Investment Trends

COVID-19 crisis caused a dramatic drop in global foreign direct investment (FDI) (-35%, in line with forecasts) in 2020, reaching $1 trillion from $1.5 trillion in 2019, the lowest point since 2005 and 20 percent lower than the year of the global financial crisis. The lockdowns around the world in response to the COVID-19 pandemic slowed down existing investment projects, and the prospects of a recession led multinational enterprises (MNEs) to re-assess new projects. The impact of the pandemic on global investment trends was immediate and concentrated in the first half of 2020. In the second half, cross-border M&As and international project finance deals partly recovered (although the recovery was concentrated in developed economies). In contrast, greenfield investment continued its negative trend throughout 2020 and into the first quarter of 2021.

Moreover, current forecasts show the beginning of a recovery in 2021 – to about $1.1-$1.2 trillion – and an increase in 2022 which could slowly bring FDI back to the 2019 level. The uncertainty connected to the access to vaccines, the emergence of virus mutations and delays in reopening are the responsible for this modest recovery.

The decline was heavily skewed towards developed economies, where FDI fell by 58 percent, in part due to oscillations caused by corporate transactions and intrafirm financial flows. FDI in developing economies decreased by a more moderate 8 percent, mainly because of resilient flows in Asia. As a result, developing economies accounted for two thirds of global FDI, up from just under half in 2019.

FDI pattern contrasted with those in new project activity, where developing countries are bearing the brunt of the investment downturn. In developing countries, the number of newly announced greenfield project fell by 42 percent and the number of international project finance deals – important for infrastructure – by 14 percent. This compares to a 19 percent decline in greenfield investment and an 8 percent increase in international project finance in developed countries.

The rapid and simultaneous interaction of supply and demand-side shocks generated a cascade of effects. The slowdown in project activity (across greenfield, project finance and cross-border mergers and acquisitions (M&As)) resulted in a large drop in new equity flows. Intracompany loans were negative in many countries because of changes in financial positions within MNEs in response to the crisis. Lower earnings also affected reinvestment; the profits of the largest MNEs plunged by 36 per cent on average. Although reinvested earnings declined by only 7 per cent overall, in many large host countries they declined significantly.

The impact of the pandemic on global FDI was concentrated in the first half of 2020. In the second half, cross-border M&As and international project finance deals largely recovered. But greenfield investment – more important for developing countries – continued its negative trend throughout 2020 and into the first quarter of 2021.

FDI trend varied significantly by region. Developing regions and transition economies were relatively more affected by the impact of the pandemic on investment in GVC-intensive and resource-based activities. Asymmetries in fiscal space for the roll-out of economic support measures also drove regional differences. In particular:

- Among developed countries, FDI flows to Europe fell by 80 percent. The fall was magnified by large swings in conduit flows, but most large economies in the region saw sizeable declines. Flows to North America fell by 42 percent; those to other developed economies by about 20 percent on average. In the United States the decline was mostly caused by a fall in reinvested earnings.
- FDI flow to Africa fell by 16 percent to $40 billion – a level last seen 15 years ago. Greenfield project announcements, key to industrialization prospects in the region, fell by 62 percent. Commodity exporting economies were the worst affected.
- Flows to developing Asia were resilient. Inflows in China increased, by 6 percent, to $149 billion. South-East Asia saw a 25 percent decline, with its reliance on GVC-intensive FDI an important factor. FDI flows to India increased, driven in part by M&A activity.
- FDI in Latin America and the Caribbean plummeted, falling by 45 percent to $88 billion. Many economies on the continent, among the worst affected by the pandemic, are dependent on investment in natural resources and tourism, both of which collapsed.
- FDI flows to economies in transition fell by 58 percent to just $24 billion, the steepest decline of all regions outside Europe. Greenfield project announcements fell at the same ate. Th fall was less severe in South-East Europe, at 14 percent, than in the Commonwealth of Independent States (CIS), where a significant part of investment is linked to extractive industries.

FDI in structurally weak and vulnerable economies was further weakened by the pandemic. Although inflows in the last developed countries (LCDs) remained stable, greenfield announcements fell by half and international project finance deals by one third. FDI flows to small island developing States (SIDM) fell by 40 percent, and those to landlocked developing countries (LLDCs) by 31 percent.

COVID-19 has caused a collapse in investment flows to sectors relevant for the SDGs in developing countries. All but one SDG investment sector registered a double-digit decline from pre-pandemic levels. The shock exacerbated declines in sectors that were already weak before the COVID-19 crisis – such as power, food and agriculture, and health.

Large MNEs, key actors in global FDI, are weathering the storm. Despite the 2020 fall in earnings the top 100 MNEs significantly increased their cash holdings, attesting to the resilience of the largest companies. The number of State-owned MNEs, at about 1,600 worldwide, increased by 7 percent in 2020; several new entrants resulted from new State equity participations as part of rescue programs.

Looking ahead, global FDI flows are expected to bottom out in 2021 and recover some lost ground, with an increase of about 10 to 15 percent. This would still leave FDI some 25 percent below the 2019 level. Current forecasts show a further increase in 2022 which, at the upper bound of projections, would bring FDI back to the 2019 level. Prospects are highly uncertain and will depend on, among other factors, the pace of economic recovery and the possibility of pandemic relapses, the potential impact on FDI of recovery spending packages and policy pressures.

The relatively modest recovery in global FDI projected for 2021 reflects lingering uncertainty about access to vaccines, the emergence of virus mutations and delays in the reopening of economic sectors. As FDI tends to trail other macroeconomic indicators after a shock, a full and broad-based recovery in flows to pre-pandemic levels is expected to take longer. This is despite expectations of a boom in capital expenditures by MNEs as a result of a peak in cash holdings and pent-up spending plans. Increased expenditures on both fixed assets and intangibles will not translate directly into a rapid FDI rebound, as confirmed by the sharp contrast between rosy forecasts for capital expenditures and still depressed greenfield project announcements. Moreover, even the FDI recovery will be uneven.

Indeed, early indicators – FDI projects in the first months of 2021 – confirm diverging trajectories between cross-border M&As, largely driven by financial market dynamics, and greenfield projects. After fully recovering in the second half of 2020, cross-border M&A activity remained broadly stable in the first quarter of 2021. Notably, both the number and the value of newly announced M&A deals are on the increase in 2021, suggesting a potential surge in M&A activity later in the year. Announced greenfield investment is not showing signs of recovery yet; after a significant contraction in 2020, it remained weak in early 2021.

The modest growth forecast for 2021 – to about $1.1–1.2 trillion – would still put global FDI flows slightly above the range projected this time last year. The upward revision is supported by several factors. Despite delays and setbacks, the deployment of vaccines will allow more and more countries to ease restrictions during 2021. Excess savings by households and pent-up consumer demand are expected to drive growth, especially in wealthier economies. This will have positive spillovers for trade in goods and for commodity prices, which are both increasing. The anticipated growth spurt will likely raise corporate profitability, with a positive effect on the reinvested earnings component of FDI.

Moreover, governments in developed countries and higher-income emerging markets have responded to the COVID-19 crisis with large fiscal stimulus programs, mostly in the form of transfers to distressed households and firms. As current measures wind down, both the European Union and the United States have pushed forward public investment strategies. Such measures will have a positive effect on FDI, particularly in the infrastructure, green and digital economy sectors. In addition, low borrowing costs and buoyant financial markets worldwide are pushing up cross-border M&A activity. The withdrawal of immediate fiscal support measures may also lead to a spike in M&As as distressed firms seek buyouts.

Current projections suggest that FDI will increase a further 15–20 percent in 2022, up to $1.4 trillion. This would imply that FDI will largely recover by the end of 2022 in the baseline forecast, which assumes continued improvement in the health and economic situations over the next two years. The most optimistic upper-bound scenario implies the absence of subsequent regional or global crisis relapses, as well as rapid economic growth and high investor confidence. Under these conditions, FDI could fully recover to its pre-pandemic level of about $1.5 trillion by 2022. The lower-bound scenario reflects the possibility of a prolonged downturn in global FDI. Although FDI is not expected to contract further, it could remain at a low level – about $1.2 trillion, over 2021 and 2022. A full recovery of FDI to historical levels is not assured. In the medium term, the pandemic could accelerate the push towards improving supply-chain resilience and lead to policy pressures for greater national or regional self-sufficiency. Tighter restrictions on international trade and investment have already emerged because of the pandemic. A rebalancing of global supply chains towards more local (domestic or regional) operations, possibly boosted by policy incentives, could exert lasting downward pressure on global FDI.

SOURCE:
-Global Investment Prospect, UNCTAD June 2021.

• World: Focus on construction and infrastructures opportunities

The volume of global construction output declined by only around 2.4 percent in 2020, less than half the rate of decline in the world economy. Construction is an essential industry in countries, enabling it to continue working also during lockdowns. Not to mention "work at home" orders which have encouraged people to invest in improvements to their own houses. However, amongst the 90 countries included in the Global Construction Report 2030, 16 of them had a double-digit percentage decline in their construction volumes. Only Saudi Arabia had a double-digit percentage increase.

In future years construction is likely to underperform the global economy, as it experiences the consequences of stretched public finances, despite many countries have announced plans to increase investment in infrastructure. Construction volumes are expected to increase globally by an average of 3.2 percent a year, as the world recovers from COVID-19 pandemic.

Over the longer term (2023 to 2030), the volume of construction output is projected to increase by an average of 2.3 percent a year globally, with annual growth rates varying between declines in some countries and increases in others. Particularly, Tanzania, Ethiopia and Bangladesh's construction outputs are expected to exceed 8 percent. Also, the value of global construction output in US dollars is estimated to increase from $11.6 trillion in 2020 to around $14.8 trillion in 2030.

Another report, from GlobalData, expects a growth will be even stronger (5.7%) in 2021, despite the uncertainty over the pandemic. This predicted growth is predicated on the assumption that governments and public health authorities will not reintroduce strict lockdown policies and that construction sites will be able to continue to operate with minimal disruption.

Many markets have managed to regain growth momentum and have already returned to pre-pandemic levels. Out of 65 markets that have produced quarterly data for the first quarter of 2021, 25 had recorded year-on-year growth in that period.

From 2022 to 2025, global output growth is predicted to average 3.7% a year. The report does acknowledge that, apart from Covid-19, the industry has a number of issues. These include disruptions to supply chains, high prices for construction materials and demand for some materials.

Among macro areas, Europe and Latin America were the worst affected in terms of construction output owing to strict lockdown. However, as operations resumed in Q3 2020 in most of the major markets, the construction output is likely to recover in 2021.

In APAC (Asia-Pacific Countries), the construction industry in Vietnam has been the best performing one. Despite the coronavirus outbreak, the sector continued to increase strongly in 2020, the growth is expected to reach 5.5%. In China, the construction output is expected to rebound to over 10% in 2021. Moreover, China is on its way to becoming the largest single construction industry over the next decade. Most of the governments in APAC are focusing on infrastructure development to help economic recovery. In China for instance, over the next fifteen years, the Chinese state railway operator also plans to double the size of its high-speed railway network.

Similarly, in Australia, around US$14 billion will be invested in hard infrastructure projects including road and rail projects (US$7.5 billion), road safety upgrades (US$2 billion), and upgrading local roads and footpaths (US$1 billion). Moreover, the government is also offering funding for accelerating the implementation of the 5G network in the country. Such investments are expected to positively impact the overall construction industry in APAC.

The European construction sector was severely impacted in 2020 due to COVID-19 crisis. The sector is expected to rebound in 2021 with construction output likely to recover by 4%. COVID-19 impact was strong mainly in Italy, France and Luxembourg, with construction activities declining sharply. In countries such as Finland where lockdown was less drastic, the construction activity was only moderately impacted during February-April 2020. More than 50% of the countries regained construction activity to pre-crisis levels excluding Slovakia, Poland, Bulgaria, Spain and Czech. While the Netherlands and Germany regained or slightly surpassed the February level. In 2020, in France and Spain housing permits declined which could impact housing completion in the coming years. Also, spending on commercial buildings is likely to decline in 2021, given the poor financial performance of several firms and impact of COVID-19. In 2021, countries with stringent lockdowns are expected to witness strong rebounds.

The construction industry in Middle East was also affected due to the suspension of economic activities to contain the spread of the coronavirus outbreak. The onset of the coronavirus and subsequent decline in the oil prices had a negative impact on the construction sector. Although construction activities were affected, the work continued but with reduced productivity while keeping social distancing norms in mind. However, the sector is expected to recover in 2021 with various upcoming construction projects across Middle East.

The global pandemic disrupted economic activities in Africa, affecting the construction sector as well. The construction industry in South Africa came to a halt as the country entered into a hard lockdown in Q1-Q2 2020. In response to the global coronavirus pandemic, the South African government took several measures and imposed emergency restrictions to contain the spread of the virus. Thus, resulting in a muted demand for construction activities in the country.

According to the last KPMG Report (Emerging Trends in Infrastructure, 2021) the world is already moving forward from the COVID-19 pandemic, and they expect the infrastructure sector to emerge from the crisis with renewed vigor, fulfilling a key role as a catalyst to sustainable economic recovery. Where COVID-19 defined 2020, it will be growth, sustainability and resilience that will define 2021 and this decade.

Overall, prospects about construction and infrastructure are optimistic.

SOURCE:
- KMPG, Emerging Trends in Infrastructure, Edition 2021.
- Business wire, Global Construction Industry Report 2021 with Q12021 Updates on the Impacts of COVID-19, August 2021.
- A. Brown, Global construction industry to grow by 5.7% in 2021, International construction, July 2021.

• European Union: Focus on investments and programs in the EU region

The EU's long-term budget, coupled with NextGenerationEU (NGEU), the temporary instrument designed to boost the recovery, will be the largest stimulus package ever financed in Europe. A total of €2.018 trillion in current prices will help rebuild a post-COVID-19 Europe. It will be a greener, more digital and more resilient Europe. The new long-term budget will increase flexibility mechanisms to guarantee it has the capacity to address unforeseen needs. It is a budget fit not only for today's realities but also for tomorrow's uncertainties. The last step of the adoption of the next long-term EU budget was reached on 17 December 2020.

The Recovery and Resilience Facility makes €672.5 billion (in 2018 prices) in loans and grants available to support reforms and investments undertaken by Member States. The aim is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions. By offering large-scale financial support for investment and reforms, the Facility will better prepare Member States for a sustainable recovery. The RRF entered into force on 19 February 2021. It will finance reforms and investments in Member States until 31 December 2026.

The Facility is the centerpiece of NGEU, a temporary recovery instrument that allows the Commission to raise funds to help repair the immediate economic and social damage brought about by the coronavirus pandemic. The Facility is also closely aligned with the Commission's priorities ensuring a sustainable and inclusive recovery that promotes the green and digital transitions. The Recovery and Resilience Facility offers an unprecedented opportunity to speed up the recovery in Europe and reinforce the commitment to the twin transition: green and digital. The Facility is an opportunity to create European flagship areas for investments and reforms with tangible benefits for the economy and citizens across the EU. These should address issues that need significant investment to create jobs and growth, and which are needed for the green and digital transitions. To benefit from the support of the Facility, Member States have to submit their recovery and resilience plans to the European Commission. Each plan sets out the reforms and investments to be implemented by end of 2026.

Each plan should effectively address challenges identified in the European Semester particularly the country-specific recommendations of 2019 and 2020 adopted by the Council. It should also advance the green and digital transitions and make Member States' economies more resilient. Once submitted, the Commission assesses Member States' recovery and resilience plans within two months after submission and translates their content into legally binding acts. Based on a proposal by the Commission, the Council has as a rule four weeks to adopt the Commission proposal. The Council's approval paves the way for the disbursement of a 13 percent pre-financing.

The uncommon fiscal package adopted by the European Council in 2020 will be crucial for the recovery of the euro area economy. The 672.5 billion euros of fiscal expansion guaranteed by the European Union can represent a fundamental opportunity to be seized. According to Bruegel's analysis, see table 1.1, the member countries of the European Union will allocate 26.2% of grants and loans from the RRF to the construction and transportation-storage sectors. In detail, Luxembourg and Belgium stand out with an estimated expenditure of 58.4 percent and 48.7 percent respectively in these sectors. Regarding Italy, on the other hand, the estimated investments in construction and transportation-storage, using the RRF, would amount to almost 50 billion euros in the coming years (25.9% of loans and grants guaranteed by the European Union). This percentage is far from the planned investments of France and Germany in these two sectors, 36.5 percent and 37.0 percent respectively, but the volume in Italy is incomparable higher (49,5 bln in Italy vs 14,9 bln in France and 10,4 bln in Germany).

Table 1.1 RRF amount (Grants + Loans) of the European members countries, NACE classificationSource: elaboration on Bruegel data.

	F Construction		H Transportation and storage		Total (a)
	Volume (bn €)	% of (a)	Volume (bn €)	% of (a)	Volume (bn €)
Austria	0,05	1,11%	0,85	18,86%	4,50
Belgium	2,56	43,24%	0,32	5,44%	5,93
Croatia	1,09	17,09%	0,52	8,09%	6,40
Cyprus		0,00%	0,09	7,40%	1,23
Czechia	0,13	1,85%	1,08	15,33%	7,07
Estonia	0,07	7,26%	0,15	14,95%	0,98
Finland	0,13	6,20%	0,11	5,01%	2,10
France	8,17	19,95%	6,78	16,56%	40,95
Germany	2,52	9,02%	7,83	28,00%	27,95
Greece	2,85	15,65%	0,76	4,18%	18,19
Hungary	0,19	2,63%	1,72	23,93%	7,20
Italy	15,02	7,84%	34,55	18,04%	191,50
Latvia		0,00%	0,30	16,18%	1,83
Lithuania		0,00%	0,35	15,60%	2,22
Luxembourg	0,02	25,71%	0,03	32,67%	0,09
Poland		0,00%	7,30	20,31%	35,97
Portugal	1,44	8,65%	1,51	9,10%	16,64
Romania	3,15	10,71%	8,73	29,71%	29,39
Slovakia	0,74	11,32%	0,80	12,24%	6,55
Slovenia	0,09	3,47%	0,31	12,56%	2,48
Spain		0,00%	13,20	18,99%	69,53
Sweden	0,69	20,98%	0,15	4,46%	3,30
Total	**38,92**	**8,07%**	**87,44**	**18,14%**	**482,01**

SOURCE:
Recovery plan for Europe, European Commission, link https://ec.europa.eu/info/strategy/recovery-plan-europe_en

Chapter 2. THE PRESENCE OF ITALIAN ENGINEERING, ARCHITECTURAL AND CONSULTANCY COMPANIES IN THE WORLD

This chapter analyses the presence of Italian engineering, architectural and consultancy companies in the world. The first section describes the sample, the second shows the results of the survey, the third summarizes the main findings.

• Sample

OICE associated companies produced in 2020 a global turnover of 3,001 million euro (figure 2.1.) The expected turnover in 2021 is equal to 3,466 million euro.

The value of turnover abroad accounted for 57.4% of the global turnover in 2020.

Figure 2.1. OICE associated companies' global turnover

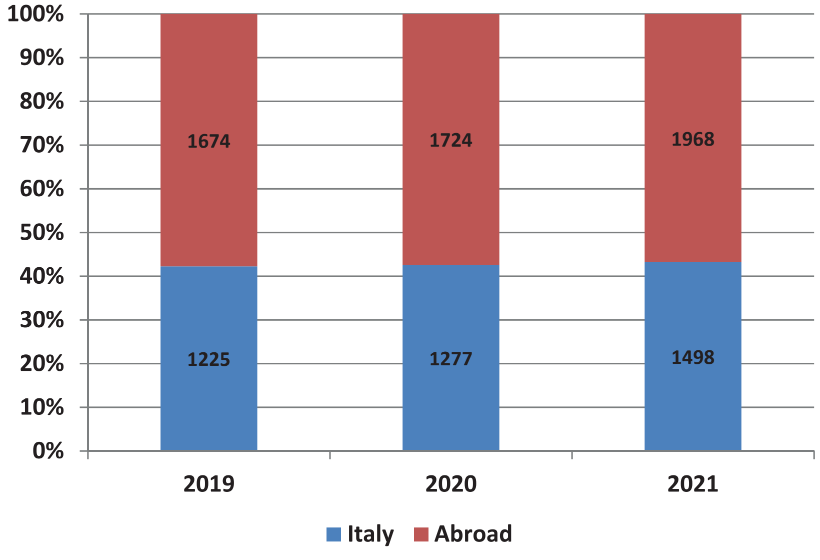
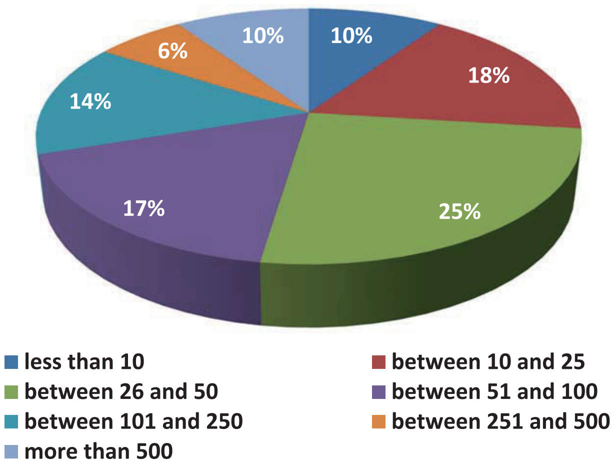


Figure 2.2 illustrates the companies' size regarding the number of staff.

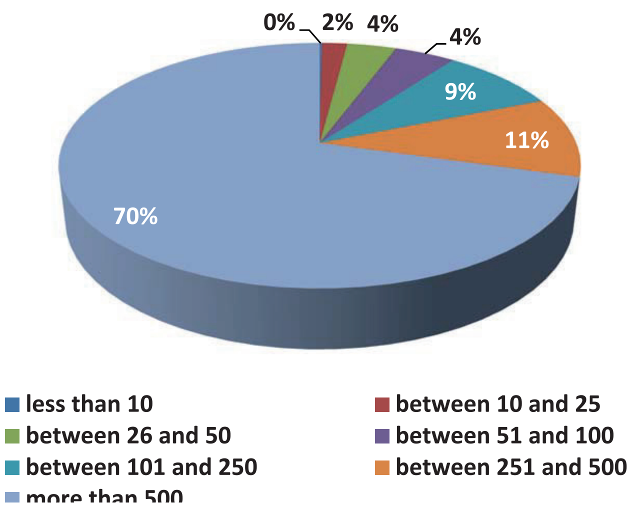
43% employ between 11 and 50 staff, 37% between 51 and 500, while 10% are micro companies, with less than 10 staff.

Figure 2.2 Company size, by number of employees, 2020



Companies with more than 500 staff (10% of the sample) account for 70% of global turnover (figure 2.3), companies with 251 to 500 staff cover 11% of global turnover and companies with 101 to 250 staff account for 9% of global turnover.

Figure 2.3 Production value, by company size, 2020

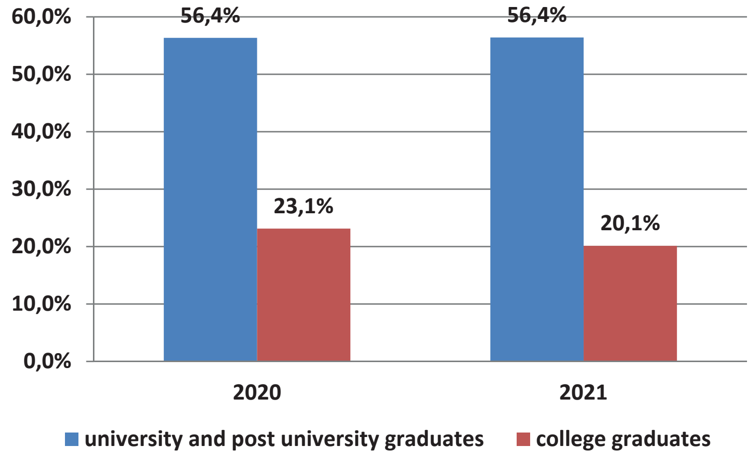


• **Results of the survey:**

- **Staff and Turn Over**

In 2020, 56.4% of staff held a bachelor's degree or a higher qualification (figure 2.4), This percentage has remained stable in 2021. Interestingly, the number of college graduates has decreased from 23.1% in 2020 to 20.1% in 2021.

Figure 2.4 Employee education



Companies with more than 500 staff hold the highest percentage of university graduates (65.3%, figure 2.5), while companies with less than 10 employees have the lowest number of university graduates (9.3%).

Figure 2.6 provides the percentage of women employees by company size. Companies with less than 10 staff has the highest percentage of women employees in both years (37.2% in 2020 and 38.8% in 2021) and shows a growth of +18.8% with respect to 2020. Companies with 11 to 25 staff has shown the lowest percentage of women employees in 2020 (16.3%). Biggest companies (with more than 500 staff) had the second lowest percentage of women employees (22.5%) and the highest decrease in 2021 with respect to 2021 (-39.5%). Overall, the percentage of women employees decreased by 20.7%.

Figure 2.5 Employee education, by company size, 2020

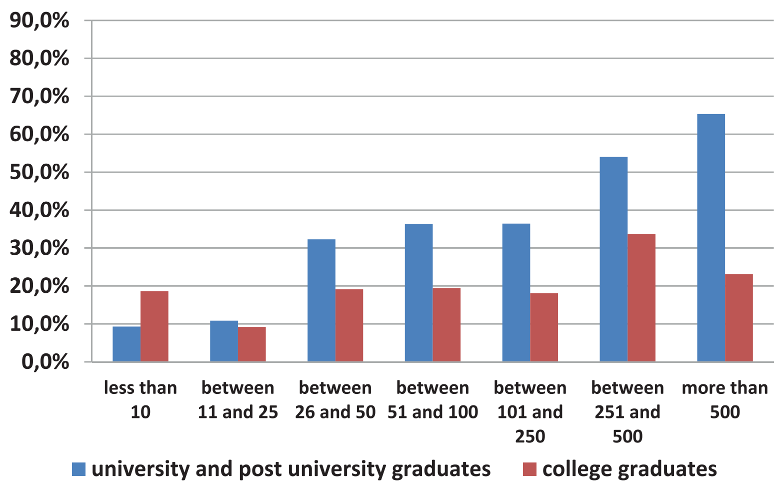


Figure 2.6 Women employees, by company size, 2020

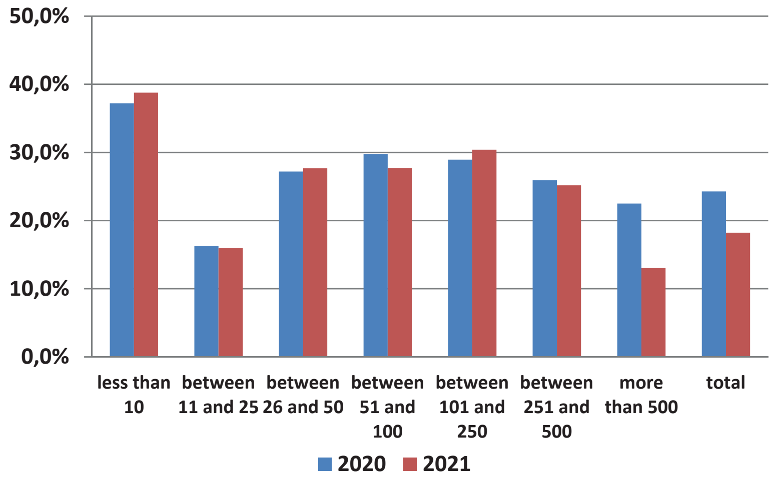


Figure 2.7 provides the percentage of foreign production value, by firm size.

Companies with 11 to 25 employees have the highest ratio of foreign production (74.9% of their total production value), followed by firms with more than 500 (74.1% of the total). On the other hand, companies with 251-500 staff have the lowest percentage, with export corresponding to 13.7% of their turnover, followed by companies with less than 10 staff (32.6%).

Figure 2.7 Share of production value made abroad, by firm size, 2020

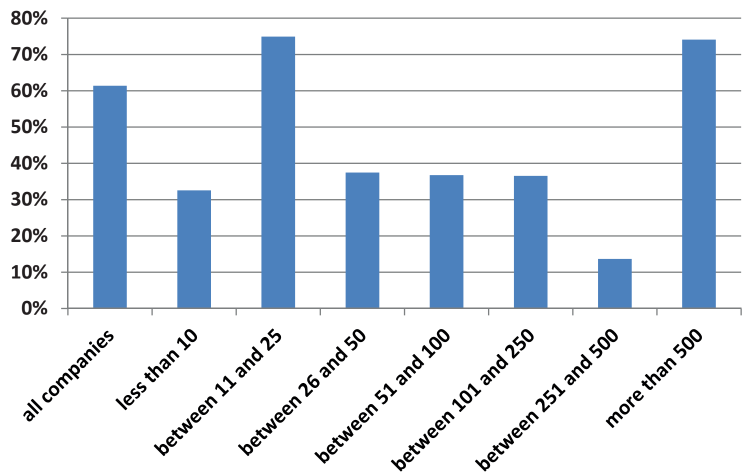
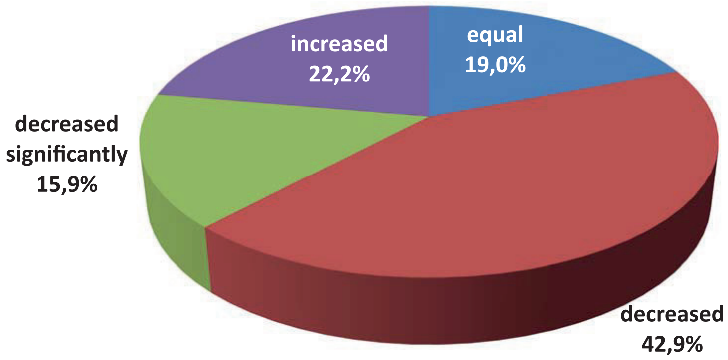


Figure 2.8 shows the foreign production of 2020 vs 2019. For the 58.7% of companies, the foreign production decreased (for the 15.9% of them the production abroad decreased significantly). For the 19.0% of the sample the foreign production remained equal while for 22.2% of firms the foreign production increased in 2020.

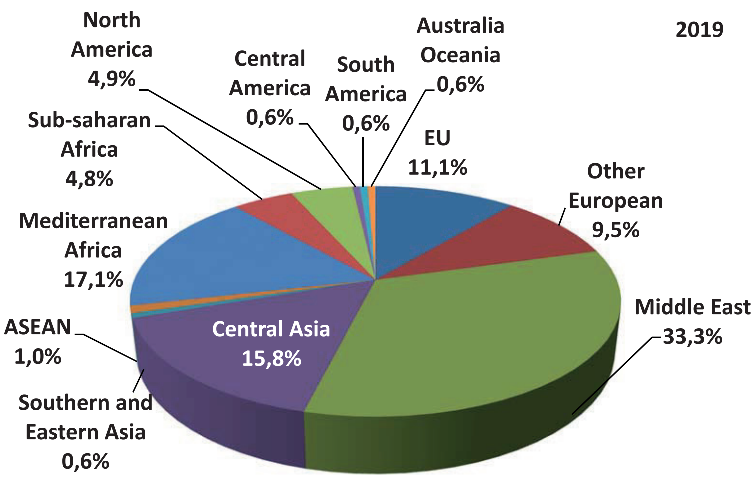
Figure 2.8 Foreign production, 2020 vs 2019

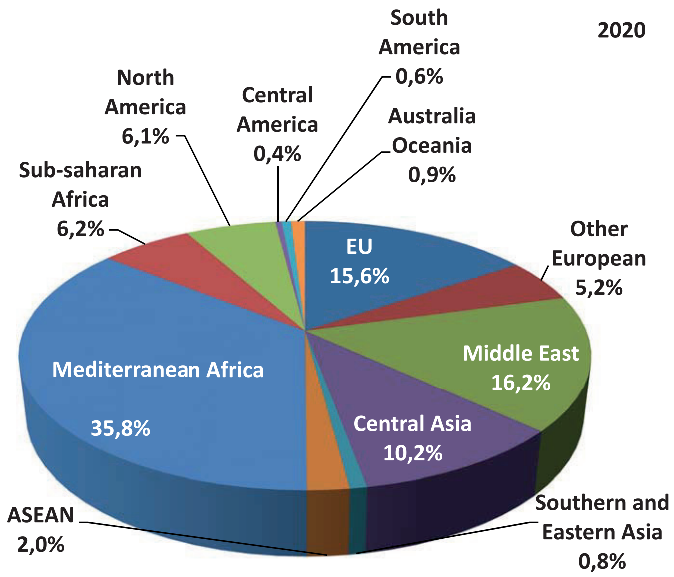


Considering the areas of activity, (figure 2.9) the first one in 2020 is Mediterranean Africa (35.8%) followed by Asia (29.2%; particularly 16.2% Middle East, 10.2% Central Asia, 2.0% ASEAN and 0.8% Southern and Eastern Asia).

European Union accounts for 15.6% while European countries outside the EU for 5.2%. Sub-Saharan Africa and North America account respectively for 6.2% and 6.1% while Central America, North America, and Oceania combined account for 2.0%.

Figure 2.9 Production value, by area, 2019 and 2020





The top sector in terms of value of foreign activity is energy (62%). Transportation accounts for 17%, way more than in the former year, followed by construction-urban planning with 9%. The remaining 13% of foreign production value covers manufacturing, other infrastructures, environment and agriculture, and ICT sectors (figure 2.10).

Figure 2.10 Foreign production value, by sector, 2020

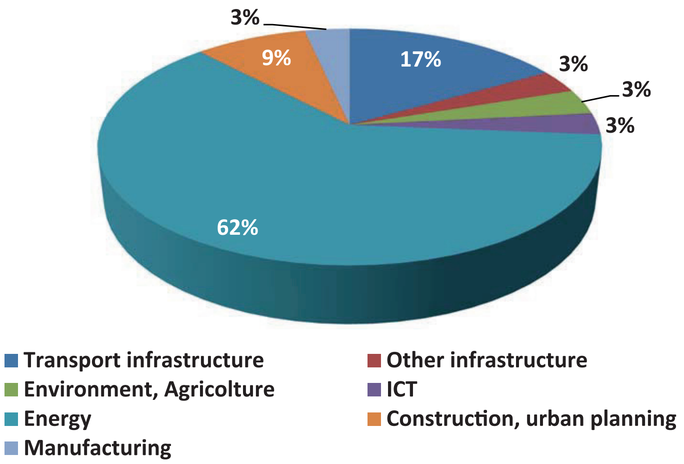
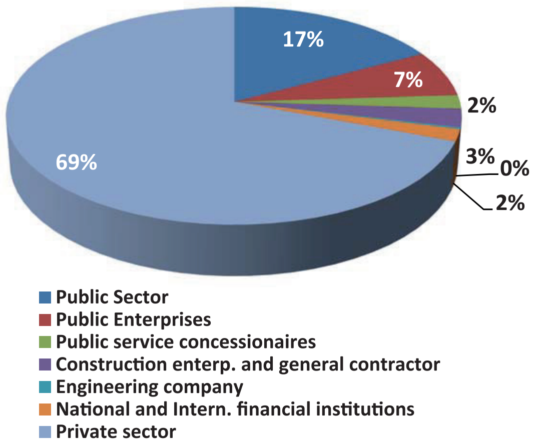


Figure 2.11 illustrates the percentage breakdown of foreign production by client. Private sector costumers account for 69%, less than in the former year, followed by public sector 17% and public enterprises 7%.

Figure 2.11 Foreign production value, by client, 2020



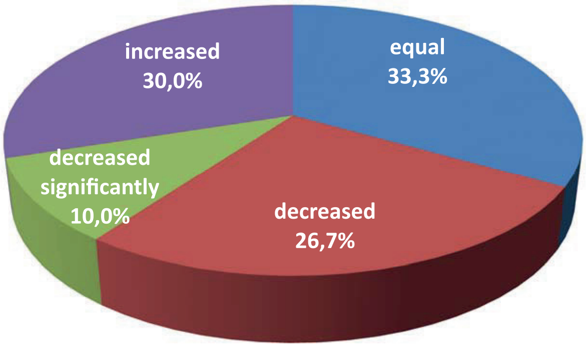
• A preliminary view on 2021

This section provides some insights on the ongoing year. Data shown in figures have been collected at the end of May 2021.

Companies project an increase of production value abroad of about 14% in 2021 in comparison to 2020.

Figure 2.12 shows opinions of firms about the foreign production of 2021 vs. 2020. For the 36.7% of companies the value of their foreign production decreased but only for a 10% of them this value decreased significantly (a lowest percentage with respect of figure 2.8). For the 30% of companies the production abroad increased while for a 33.3% of them this value remained stable.

Figure 2.12 Foreign production, 2021 vs 2020

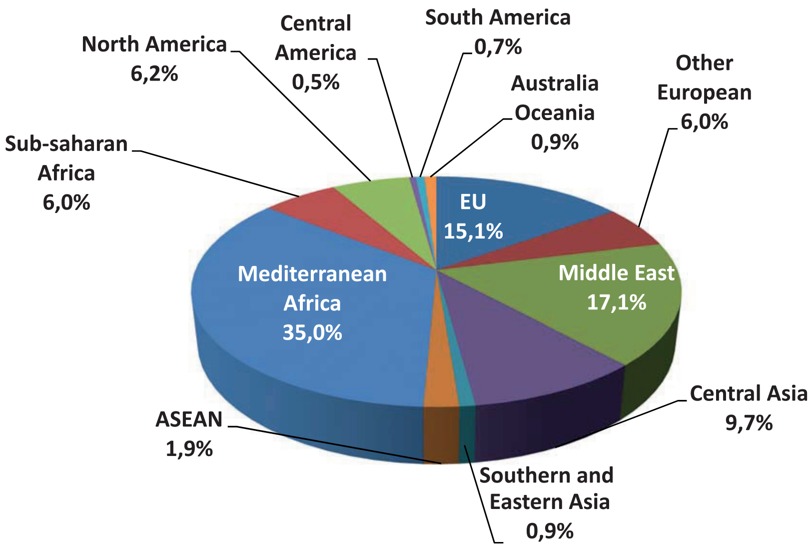


Considering the areas of activity, (figure 2.13) companies are now re-focusing their activity on farther foreign market in comparison with 2020, when they were focusing on closer market because of the pandemic.

Indeed, the first area is Mediterranean Africa (35% of foreign estimated activity in 2020) followed by Asia (29.6%; 17.1% Middle East, 9.7% Central Asia, 1.9% ASEAN, 0.9% Southern and Eastern Asia). EU area is still one of the most important (15.1%) while European countries outside the EU account for 6.0%.

Sub-Saharan Africa and North America account respectively for 6.0% and 6.2%, while South America, Central America, and Oceania combined account for 2.1%.

Figure 2.13 Production value, by area, 2021



The top sector in terms of value of foreign activity in 2021 is energy (56%). Construction-urban planning, Environment-agriculture, and transportation account for 33.2%. The remaining 11.0% of estimated foreign production value in 2021 covers manufacturing, other infrastructure, and ICT sectors (figure 2.14).

Figure 2.14 Foreign production value, by sector, 2021

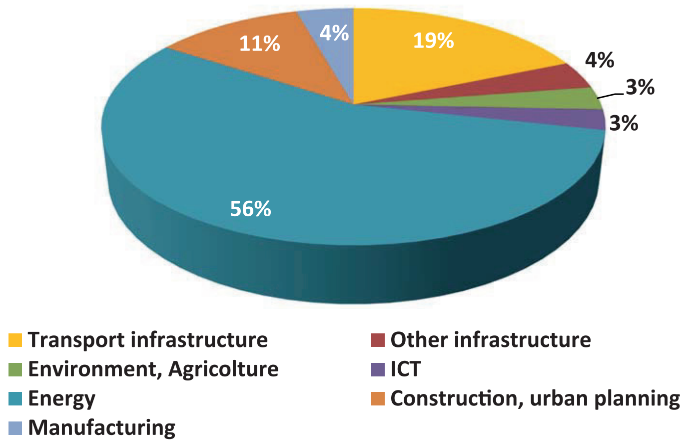
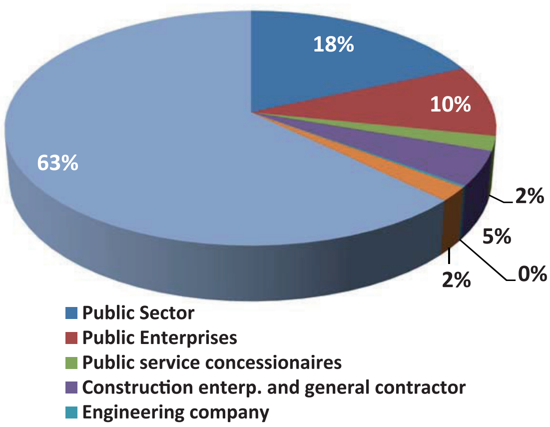


Figure 2.15 illustrates the percentage breakdown of foreign production by client estimated in 2021. Private sector costumers account for 62.8%, followed by public sector 18.4% and public enterprises 9.8%. Public service concessionaires, construction enterprises and general contractor, engineering company and national and international financial institutions combined account for 9.0%.

Figure 2.15 Foreign production value, by client, 2021

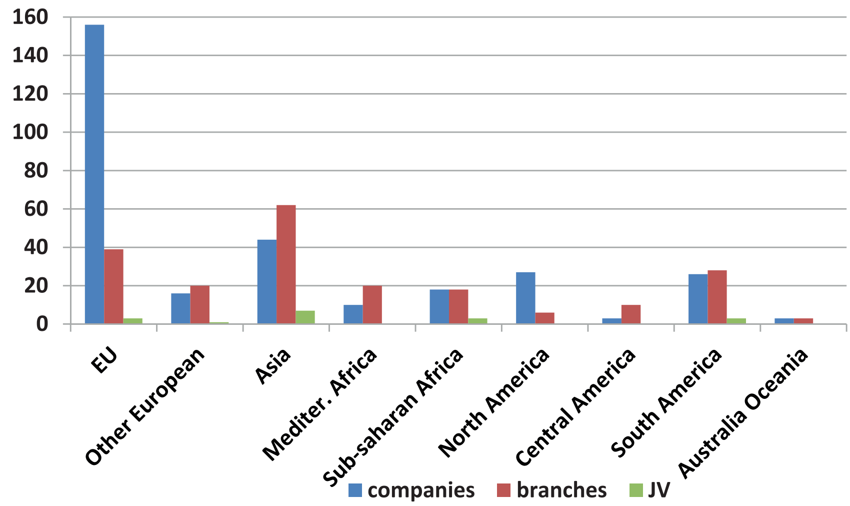


• Operational organization: companies, branches, and partnerships abroad

This section provides a brief description of the operational organization of OICE's companies, specifically focusing on the number of companies, branches, and partnerships abroad.

Figure 2.16 shows the number of foreign companies, branches, and partnership by area in 2020 and points out that out of 303 foreign companies, 156 are located in the EU (51.5%), 44 in Asia (14.5%), 27 in North America (8.9%) and 26 in South America (8.6%). Regarding the number of branches, out of 206 of them, 62 are located in Asia (30.1%), 39 in EU (18.9%), 28 in South America (13.6%), 20 in Mediterranean Africa and 20 in other European countries (both 9.7% of the total). About the number of Joint Ventures, 7 out of 17 are located in Asia (41.2%), 3 in South America, 3 in Sub-Saharan Africa, 3 in the EU, and only 1 in other European countries.

Figure 2.16 Number of foreign companies*, branches and partnerships by area, 2020



*The Italian company has a share in the ownership of the foreign company higher than 25 per cent.

• Conclusions

This chapter highlights some relevant aspects of Italian engineering, architectural and consultancy companies' activities, and organization of foreign markets. Mediterranean Africa and Asia are paramount for foreign activities in terms of value of production. The other relevant geographic area is the EU, but also countries outside the Union.

Energy and transportation and construction are the leading sectors of activity. The most significant clients are private and public sectors.

Finally, the data available for the first half of 2021 provides a quite positive picture, considering the pandemic. Companies project an increase of production value abroad of about 14% in 2021 in comparison to 2020.

Chapter 3. OUTLOOKS, STRATEGIES AND TRENDS 2021-2023

The companies sample provides indications that allows to focus on outlooks, strategies, and future trends.

40% of the sample is active on foreign markets.

100% of companies with more than 251 staff are active on foreign market while only 18% of companies with less than 10 staff are active on international markets (figure 3.1).

Figure 3.1 Percentage of companies with international activities by size

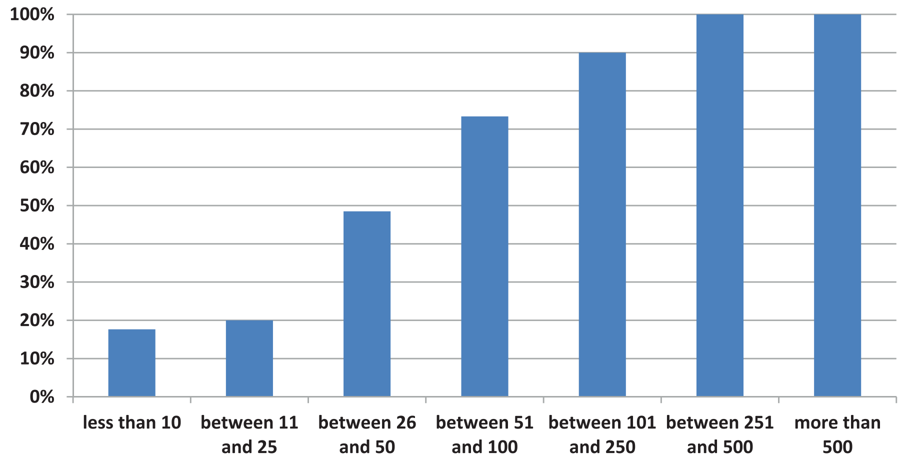
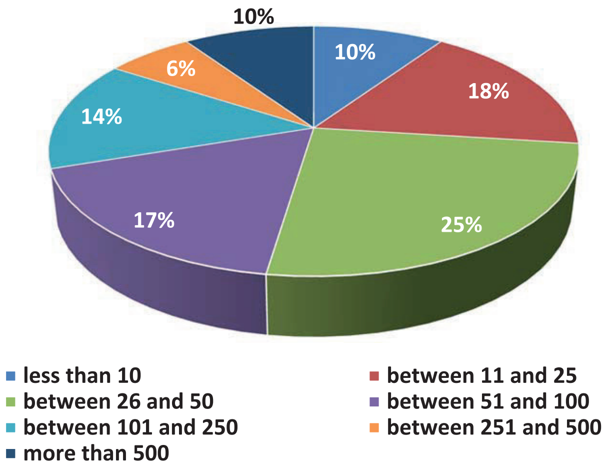


Figure 3.2 reflects the distribution in terms of size of OICE's associated companies active on foreign markets. Companies with 11 to 25 and 26 to 50 employees represent the 43% of the companies active abroad. The other clusters show percentages equal or less than 17%.

Even though size is an influencing factor that impacts on internationalization, associated companies with less than 50 employees represent 53% of the total of those active abroad. This consideration will be relevant when we consider the services useful to sustain and enhance internationalization activities among Italian engineering companies.

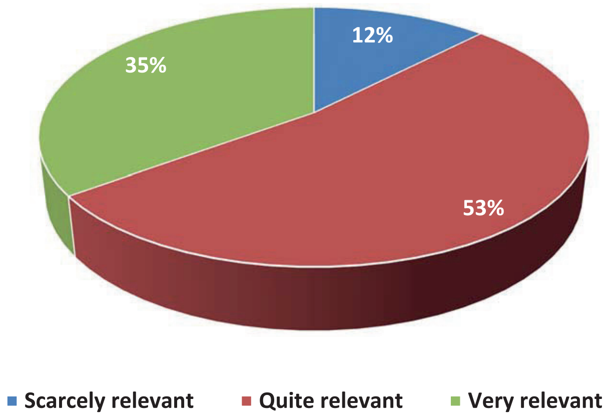
Figure 3.2 Size of companies active abroad, by number of employees



• Challenges, opportunities, and strategies related to foreign activities

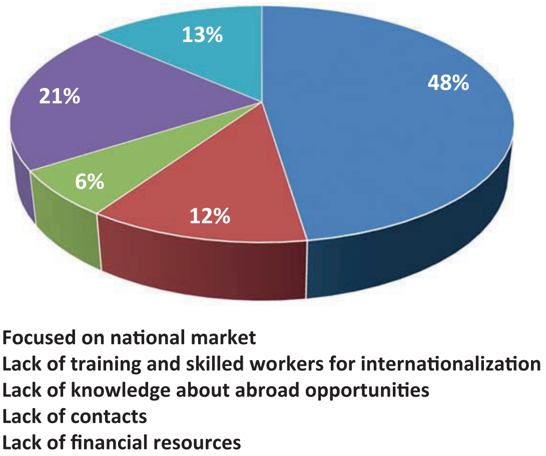
88% of companies active on international markets say that foreign activity is very or quite relevant for their strategy (figure 3.3) while the other 12% say that is scarcely relevant.

Figure 3.3 Relevance of international activities on company strategy



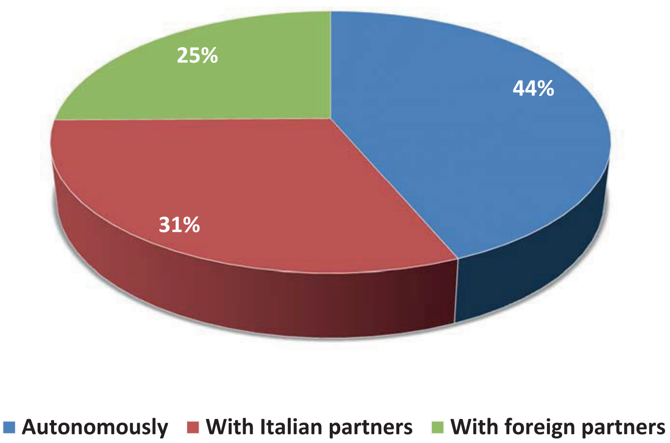
Among the companies not operating abroad (figure 3.4), 48% say that the focus on national market is the most important reason for disregarding foreign markets, 21% consider that the lack of contacts in foreign markets prevents international activity, 13% say that the lack of financial resources impedes internationalization.

Figure 3.4 Why is your company not active abroad?



Regarding the way companies carry out their internationalization activity (figure 3.5) 44% carry out their internationalization activity autonomously, 31% do it with Italian partners while 25% establish JVs with foreign partners.

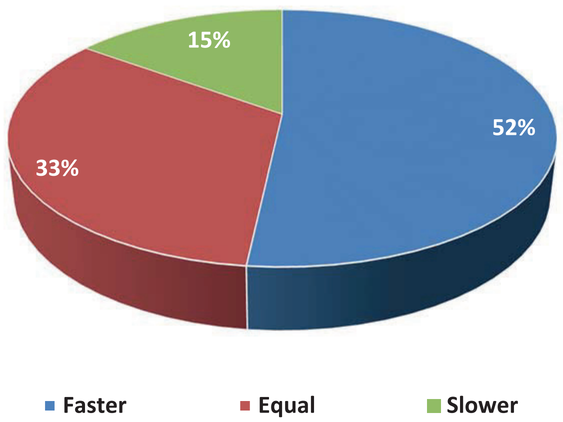
Figure 3.5 How do you carry out your internationalization activity?



Finally, figure 3.6 shows that foreign partners are faster than Italian ones in payment times. Indeed, only 15% of companies say that foreign partners are, on average, slower than Italians in payment times.

These data show that there is therefore a strong need to promote internationalization. This is a major challenge for the industry's associations and for public institutions and organizations that must improve the quality of their services and their capacity to meet SMEs expectations.

Figure 3.6 Payment time of foreign partners in comparison to Italian ones



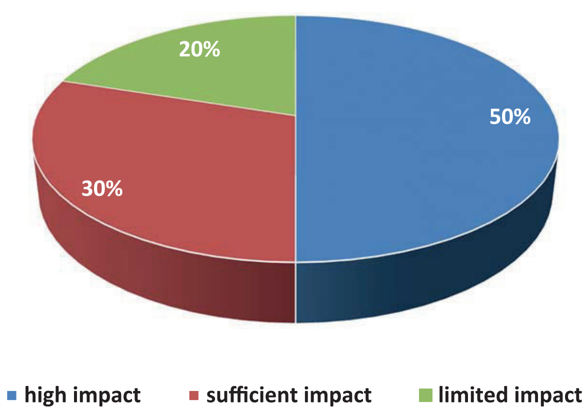
• The Covid-19 pandemic and international recovery: national and international institutional measures

This section analyzes the view of companies on national and international measures to counteract economic downturn due to pandemic.

80% of companies declared that the *Patto per l'Export*[1] measures had a high or sufficient impact on company activities with particular reference to training/information, Exhibition system, Integrated promotion and concessional finance, figure 3.7.

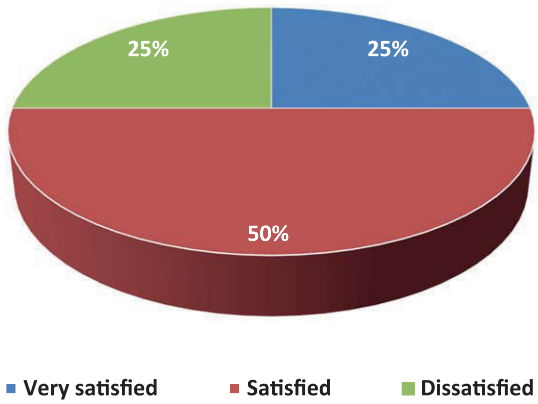
75% of companies are satisfied (25% very satisfied) with subsidized/non repayable loans by SIMEST, figure 3.8. It seems that SIMEST have matched the companies' needs. Indeed, flow of new loans has been fundamental to preserve the activity of companies during the lock-down.

Figure 3.7 What has been the impact of Patto per l'Export measures on your company growth (training, promotion, finance...)?



[1] On Monday, 8th June 2020, the signing ceremony of the **"Patto per l'Export"** took place, during which the strategic lines of support for the internationalisation of the production system were illustrated, in light of the current economic and health situation. The **Patto per l'Export** (1,4 billion Euro) consists of six pillars: 1) Communication, 2)Training/Information, 3) E-commerce, 4) Exhibition system, 5) Integrated promotion, 6) Concessional finance.

Figure 3.8 What is your level of satisfaction with subsidized/non repayable loans by SIMEST?



Focusing on relationship with foreign counterparties, as showed by figure 3.9, 73% of companies say that foreign contractors had a collaborative approach on the ongoing contracts during the first half of 2020. This is a positive feature because it means that companies can preserve activity in foreign markets notwithstanding the problems related to pandemic situation. A similar result emerges from figure 3.10: 68% of companies affirm that the institutional measures adopted by foreign countries facilitated their business abroad.

Figure 3.9 What has been the reaction of foreign contractors on the ongoing contracts?

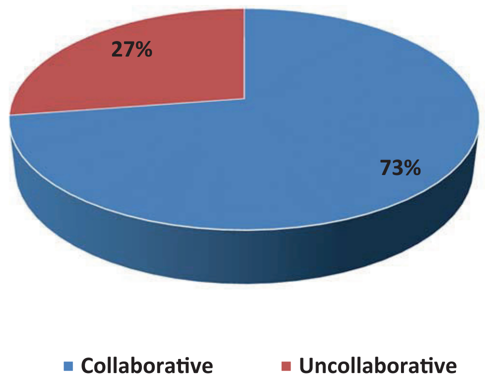
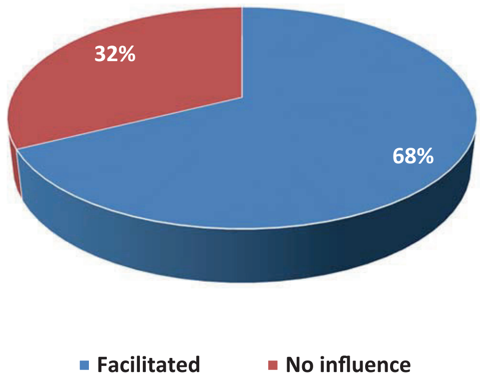


Figure 3.10 How have institutional measures of foreign countries influenced business abroad?



Considering the support of the Italian institutional and economic system abroad (such as Embassies, Italian Trade Agency etc.), 78% of companies say that this support has been useful cause it facilitated their activity abroad (figure 3.11). Focusing on international measures impact on activity abroad (such as force majeure clause, soft power actions etc.), 57% of companies declare these measures facilitated their business (figure 3.12).

Fig 3.11 How has the support of the Italian institutional and economic system influenced the activity abroad?

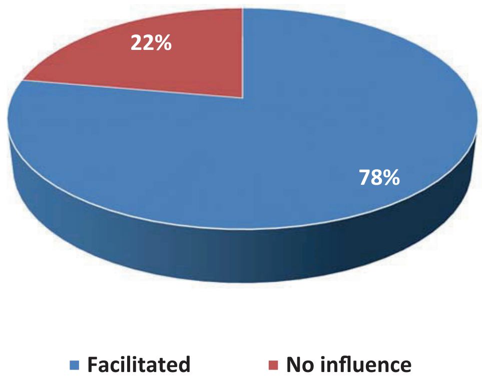
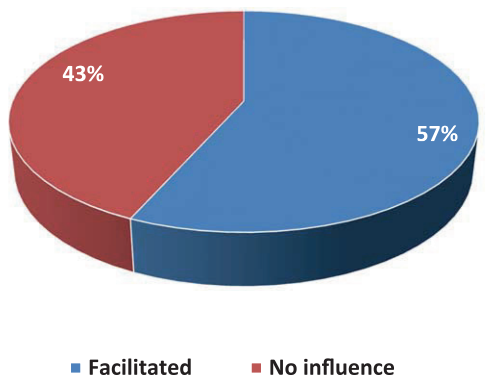


Fig 3.12 How have international measures (force majeure clause, soft power actions etc.) influenced business abroad?



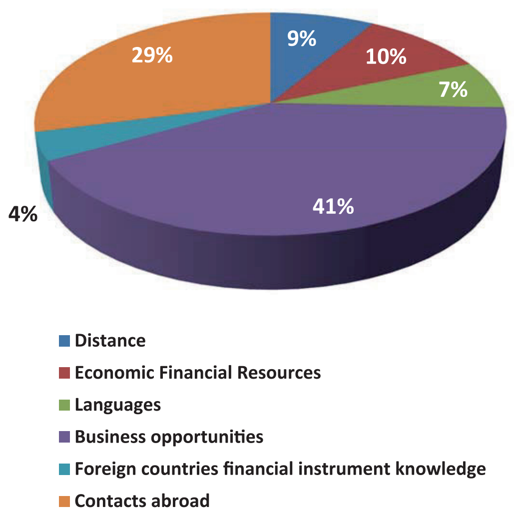
Summing up, this section highlights that both national and international measures have helped companies in managing the worst period of the first half of 2020 and that they showed to be helpful to preserve and to restore their activity.

- **Post Covid-19 pandemic strategies**

  - **Foreign markets**

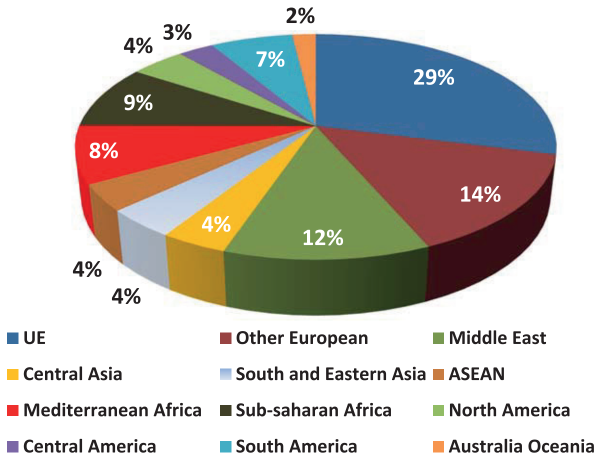
Regarding the motivations that determine the choice of a specific foreign market or a geographic area in the future (figure 3.13), 41% of companies select a foreign market according to its business opportunities, 29% choose a foreign market because they have contacts in that particular area, 9% make their choice upon the geographic distance assessment between Italy and foreign markets, 10% on the basis of economic and financial resources. Only 7% base their choice on the language and a residual 4% on the knowledge of the foreign country's financial allocation.

Figure 3.13 Selection criteria for foreign markets



Concerning the areas of interest for the next three years (figure 3.14), 29% prefer the European Union and 15% the non-EU European countries, 12% the Middle East and 9% the Sub-Saharan Africa. Geographical distance remains a paramount concern in companies' choices. This is due to an average middle size engineering industry with limited access to distant foreign markets.

Figure 3.14 Foreign areas of interest in the future



- **Institutional support**

Regarding services provided by OICE, 64% of companies used the services in 2020 Relevant services are "missions and institutional events" 28%, "training courses" 25% and "networking" 23% (figure 3.15). The remaining two services, "Direct advice" and "missions and fairs", are used by 14% and 10% of companies respectively.

These results are in line with the activities provided by the Association. OICE organizes institutional missions in foreign markets, supports networking activities among Italian associates and with foreign partners and promotes training to foster companies' capacity to work with International Financial Institutions.

Last question (figure 3.16) analyzes which business opportunities are most important to start or expand activity abroad among that offered by multilateral banks and IFAs, EU opportunities (European funds, IPA, cooperation in third regions and countries) or foreign government organizations: 39% consider the business opportunities linked to foreign government organization as a priority, 36% consider as a priority the business opportunities offered by multilateral banks and IFAs while the minority (25%) consider as a priority the opportunities linked to EU system.

Figure 3.15 Which internationalization services provided by OICE did you use?

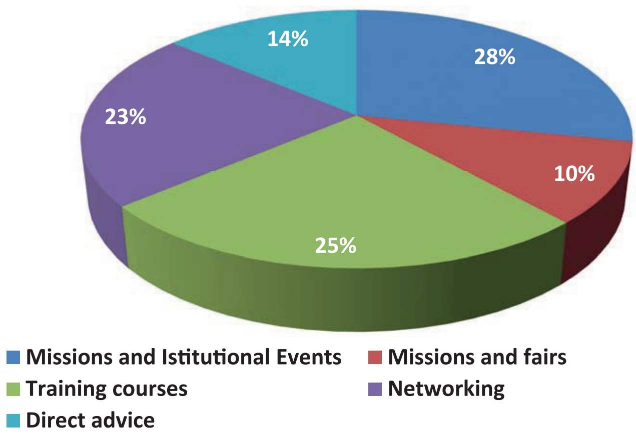
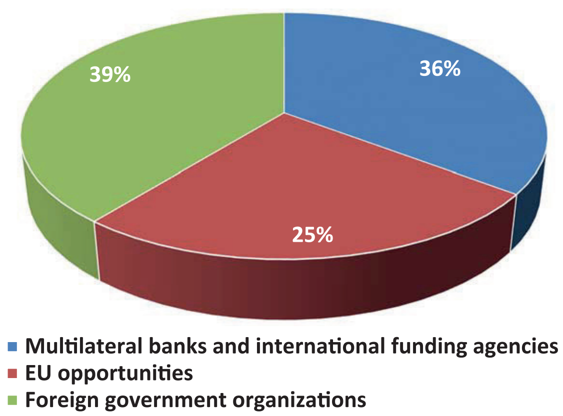


Figure 3.16 Which business opportunities are priority to start/expand your international activity? Business opportunities linked to...



• Conclusions

The previous year was characterized by an unprecedented crisis. However, the effective distribution of vaccines around the world is leading to a considerable decline in deaths, together with a gradual reopening of production activities. What we have seen during the first half of 2021 is a rebound of international activity. Even the associated companies benefited from an improved scenario. Indeed, 40% of OICE's associated companies are active on foreign markets in 2021, compared to 34% in 2020.

In order to help companies in their internationalization strategy, public and institutional support need to keep increasing. This chapter has indeed shown positive opinions about national and international measures which helped companies in managing the first half of 2020.


RINA

Chapter 4. FOCUS ON THE ITALIAN RANKING WITHIN THE IFIs

OICE's elaboration on Italian Ministry of Economy and Finance (MEF) data within the cooperation between the International Office of the Association and the Department of the Treasury (MEF).

This focus on **International Financial Institutions (IFIs)** highlights their consulting activity and presents data related to contracts awarded to Italian companies. Four charts sum up data related to consultancy contracts at the end of the chapter.

WORLD BANK (WB)

With 189 member countries, staff from more than 170 countries, and offices in over 130 locations, the World Bank Group is a unique global partnership: five institutions working for sustainable solutions that reduce poverty and build shared prosperity in developing countries. The World Bank Group works in every major area of development. It provides a wide array of financial products and technical assistance, and it helps countries share and apply innovative knowledge and solutions to the challenges they face. The World Bank Group operates in more than 170 countries, working with partners in the public and private sectors in their efforts to end poverty and tackle some of the most pressing development challenges.

In the fiscal year 2021 (July 2020-June 2021), the WB awarded 10,956 contracts for a total value of about 1,953 billion dollars. The contracts awarded to Italian consultancy companies were 51, for a value of 16.7 million dollars, accounting for 0.86% of the total. Italy ranked thirtieth for contract assignments among the Bank's member countries.

- WB Annual Meeting 2022 - Morocco

ASIAN DEVELOPMENT BANK (AsDB)

The Asian Development Bank was conceived in the early 1960s as a financial institution that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world. AsDB assists its members, and partners, by providing loans, technical assistance, grants, and equity investments to promote social and economic development. AsDB is composed of 67 members, 48 of which are from the Asia and Pacific region.

In 2020, the AsDB awarded 3,738 consultancy contracts for an overall value of around 732 million dollars. The contracts awarded to Italian consultants and consultancy companies have been 32, for a value of about 12.2 million dollars, accounting for 1.7 percent of the total amount, positioning Italy as twenty-first for contract assignments among the Bank's member countries.

- Annual Meeting 2022 – Sri Lanka

AFRICAN DEVELOPMENT BANK (AfDB)

The African Development Bank was founded in 1964 and comprises three entities: The African Development Bank, the African Development Fund and the Nigeria Trust Fund. The AfDB's mission is to fight poverty and improve living conditions on the continent through promoting the investment of public and private capital in projects and programs that are likely to contribute to the economic and social development of the region. The AfDB is a financial provider to African governments and private companies investing in the regional member countries.

In 2020, the Bank awarded 895 consultancy contracts for a total value of about 209 million dollars. The contracts awarded to Italian consultants and consultancy companies have been 12 for a value of approximately 13 million dollars, representing 6.23 percent of the total. Italy was third for total contract assignments after Senegal and Kenya and first among non-regional member countries.

- Annual Meeting 2022 - TBD

INTERAMERICAN DEVELOPMENT BANK (IDB)

The Inter-American Development Bank is the largest source of development financing for Latin America and the Caribbean. Established in 1959, the IDB supports Latin American and Caribbean economic development, social development and regional integration by lending to governments and government agencies, including State corporations. The Bank is owned by 48 sovereign states, which are its shareholders and members. Only the 26 borrowing countries are able to receive loans. In March 2015, the Bank updated its Institutional Strategy for 2010-2020. The document says that to ultimately transform Latin American and the Caribbean 'into a more inclusive and prosperous society, three main development challenges must be addressed: social exclusion and inequality, low productivity and innovation, and limited economic integration.

In 2020, the IDB awarded 4,763 consultancy contracts for an overall value of 422 million dollars: 4,625 to regional countries for a total value of 385 million dollars and 138 to non-regional countries for a total value of 37 million dollars. 2 contracts have been awarded to

Italian consultants and consultancy companies for a value of approximately 1,4 million dollars, accounting for 0.3 percent of the total. Italy ranked sixth among non-regional member countries.

- Annual Meeting 2022 - TBD

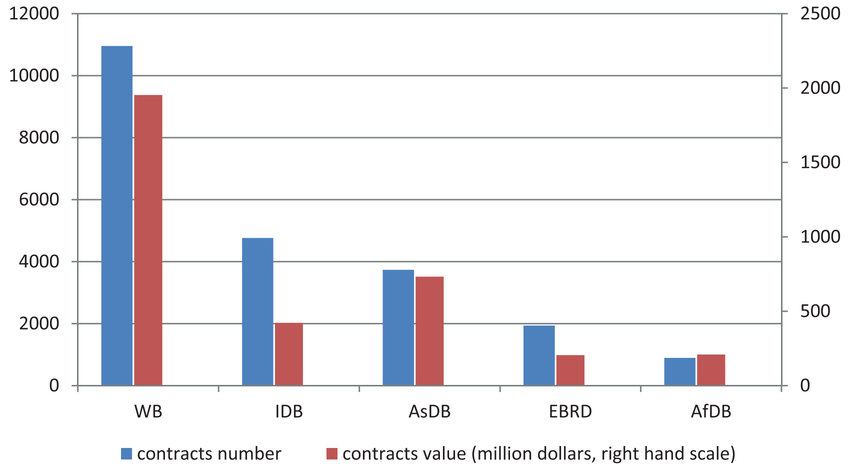
EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)

The European Bank for Reconstruction and Development (EBRD) was founded in 1991 to create a new post-Cold War era in Central and Eastern Europe, furthering progress towards market-oriented economies and the promotion of private and entrepreneurial initiative. The European Bank for Reconstruction and Development (EBRD) helps businesses and economies thrive. Through its financial investment, business services and involvement in high-level policy reform, EBRD promotes entrepreneurship and change lives. The EBRD goal is to advance the transition to open market economies, whilst fostering sustainable and inclusive growth. Urgency and the ability to respond to momentous events swiftly and decisively, whether it be the end of the Soviet Union, financial crises, the 'Arab Uprising' or the coronavirus pandemic have been among the EBRD's hallmarks from the start. Since its creation EBRD has invested over €145 billion in more than 5,700 projects.

In 2020, the EBRD awarded 1,938 consultancy contracts (projects and corporate procurement) for an overall value of 205,1 million euros. The contracts awarded to Italian consultants and consultancy companies were 51, for a value of about 13,7 million euros, equal to 6.7% of the total amount. Italy ranked fifth for contract assignments and third among G7 countries after Great Britain and Germany.

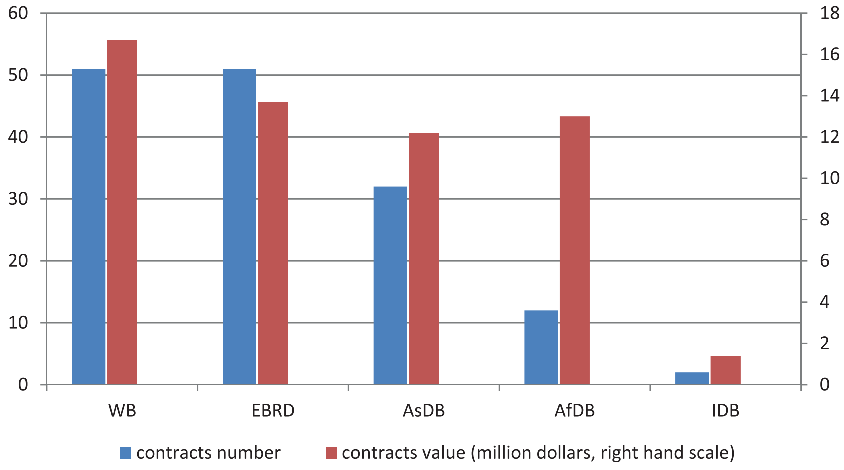
- Annual Meeting 2022 - Morocco

Figure 4.1. Total value and number of consultancy contracts, by bank



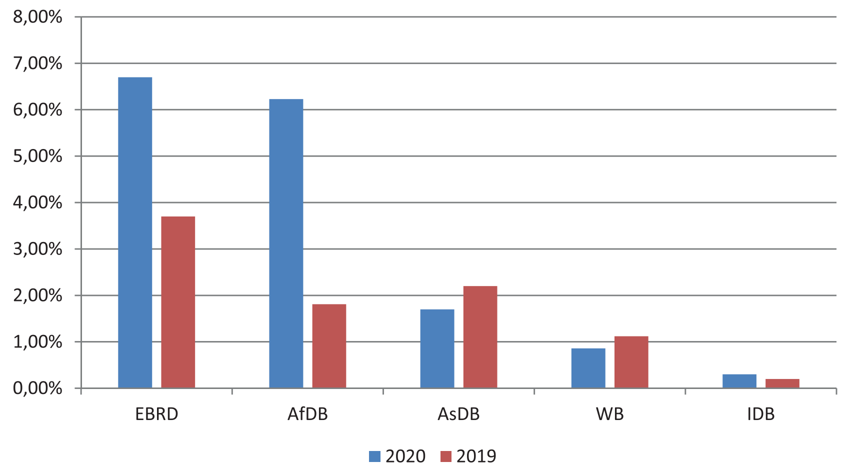
Source: elaboration on Italian Ministry of Economy and Finance data

Figure 4.2. Number and value of consultancy contracts awarded to Italian consultants and consultancy companies, by bank



Source: elaboration on Italian Ministry of Economy and Finance data

Figure 4.3. Percentage of the Italian consultancy contracts value, by bank



Source: elaboration on Italian Ministry of Economy and Finance data

Marco Ragusa
Head of International Office OICE

Chapter 5. THE ENR's Top 225

A summary of the ENR's Top 225 International Design Firms survey is proposed in this section. According to this survey the leading 225 companies generated $67.14 billion in design revenue in 2020 from projects outside home countries, showing a -7.1% decrease in 2020 from 2019 on a like-for-like basis.

American companies lead the ranking (76 companies), followed by European (57) and Chinese (24) companies.

12 Italian companies are included in the top 225 in 2020 (12 in 2019). 2 companies improved their ranking in comparison with 2019 and 4 companies are new entries in the top 225. Maire Tecnimont is the first Italian company ranked (30th, =), followed by Rina consulting (58th, =), Italconsult (68th, +3), IRD Engineering (130th, +4), Geodata Engineering (134th, -10), Manens-Tifs (138th, -8), Italferr (142nd, =), SWS Engineering (156th, a new entry), 3TI Progetti (181st, -15), Technital (185th, a new entry), F&M Ingegneria (199th, a new entry), Politecnica Ingegneria (219th, a new entry). The Italian companies achieve their turnover mainly in the transportation, industry-petroleum and general building sectors. These 12 companies are located in seven Italian regions (Lombardia, Liguria, Piemonte, Veneto, Trentino Alto Adige, Emilia Romagna, Lazio).

Among non-Italian companies with branches in Italy and associated with OICE we note, in particular, Jacobs ranked 8th (-1), Systra 29th (+4), Tractebel 32nd (+2) and Artelia 46th (+15). Jacobs show a preference for industrial and transportation sectors, Systra show a clear preference for transportation sector while Tractebel for power sector. Artelia has a diversified business, with a preference for general building.

The following two tables summarized the data of the ENR's Top 225 International Design Firms survey.

Table 6.1 How the top international design firms shared the 2020 market, $ million

Nationality	# of firms	Int'l revenue	Middle east	Asia	Aus./ Oceania	Africa	Europe	US	Canada	Lat. Amer. /Carib.
American	76	15664	1186	2089	1709	280	4622	NA	5030	749
Australian	7	6276	695	974	368	383	788	1953	792	323
Nationality	**# of firms**	**Int'l revenue**	**Middle east**	**Asia**	**Aus./ Oceania**	**Africa**	**Europe**	**US**	**Canada**	**Lat. Amer. /Carib.**
Canadian	4	11359	555	540	972	157	3372	5421	NA	341
Chinese	24	3793	421	1984	100	465	355	73	3	394
European	57	23633	3317	2037	1175	885	8773	4862	1051	1535
British	4	6363	432	716	454	191	997	2185	859	529
Dutch	4	5204	468	272	595	76	1665	1871	62	195
French	6	2048	367	303	64	170	909	53	41	140
German	6	481	166	68	0	42	130	63	0	12
Italian	12	1031	212	129	7	143	428	94	4	15
Spanish	9	2584	1359	235	23	101	325	57	44	439
Other	16	5925	313	314	32	162	4320	539	41	204
Japanese	10	956	53	486	11	60	244	30	37	33
Korean	11	704	167	386	2	31	55	14	1	48
All Others	36	4744	1464	642	429	438	329	1275	127	42
	225	67131	7858	9138	4766	2698	18537	13628	7041	3465

Source: ENR

Table 6.2 Global top 10 and Italian firms, 2020.

Rank	Firm	Int. Revenue in $ mil.	% of total revenue	General Building	Manufacturing	Power	Water Supply	Sewer / Waste	Indus. / Petroleum	Transportation	Hazardous Waste	Telecom
1	WSP Global (Canada)	4707	85	19	0	8	1	1	1	48	5	1
2	Worley (Australia)	3948	85	0	0	4	1	0	56	0	0	0
3	Aecom (USA)	3606	46	12	0	1	5	2	1	21	4	0
4	SNC-Lavalin (Canada)	3481	86	13	0	8	5	0	10	35	5	0
5	Arcadis (Olanda)	3436	91	27	5	7	2	0	9	10	2	0
6	Wood (UK)	3207	82	2	4	3	2	1	59	4	5	0
7	Fluor (USA)	2962	76	0	0	0	0	0	73	3	0	0
8	Jacobs (USA)	2909	29	2	1	3	2	2	6	11	3	0
9	Stantec (Canada)	2442	75	19	1	6	12	10	3	18	2	0
10	Dar group (EAU)	1860	100	53	0	2	2	2	1	37	0	1
30	Maire Tecnimont	543	93	0	0	0	0	0	93	0	0	0
58	Rina Consulting	187	72	0	0	0	0	0	0	0	0	0
68	Italconsult Spa	132	95	24	0	10	7	5	0	48	0	0
130	Ird Engineering Srl	32	99	1	0	0	0	2	0	85	0	0
134	Geodata Engineering Spa	27	89	2	0	26	1	7	0	54	0	0
138	Manens-Tifs Spa	27	66	66	0	0	0	0	0	0	0	0
142	Italferr Spa	25	9	0	0	0	0	0	0	9	0	0
156	SWS Engineering	18	70	0	0	0	0	0	0	70	0	0
Rank	Firm	Int. Revenue in $ mil.	% of total revenue	General Building	Manufacturing	Power	Water Supply	Sewer / Waste	Indus. / Petroleum	Transportation	Hazardous Waste	Telecom
181	3TI Progetti	14	7	0	0	0	0	0	7	0	0	0
185	Technital	12	38	0	0	0	3	0	0	34	0	0
199	F&M Ingegneria	10	44	44	0	0	0	0	0	0	0	0
219	Politecnica Ingegneria	6	29	20	0	0	0	0	0	9	0	0

Source: ENR



TECHNITAL











STATISTICAL SAMPLE

3TI PROGETTI ITALIA - INGEGNERIA INTEGRATA SpA
A.R.S. Spa Progetti Ambiente, Risorse Sviluppo
A.T. Advanced Technologies s.r.l.
AGRICONSULTING S.p.A.
AI STUDIO
AIC PROGETTI S.p.A.
Aicom s.p.a. Ingegneria e Consulting
AIRES INGEGNERIA srl
AIRIS s.r.l.
AKKAD Società di ingegneria s.r.l.
ALCOTEC S.R.L.
ALL INGEGNERIA studio tecnico associato
ambiente SpA
AP&P ALESSIO PIPINATO & PARTNERS ARCHITECTURAL ENGINEERING SRL
ARCHEST s.r.l.
ARCHITECNA ENGINEERING s.r.l.
ARCHLIVING srl
ARETHUSA srl
ARTELIA ITALIA SpA
B&B PROGETTI srl
BMS PROGETTI SRL
BMSTUDIO srl PROGETTI INTEGRATI
Brescia Infrastrutture srl - Socio unico
CEAS srl
CITTA' FUTURA s.c.
CONSILIUM Servizi di Ingegneria s.r.l.
CONTEC s.r.l. Consulenza Tecnica Servizi di Ingegneria
COOPROGETTI Scrl
COOPROGETTI società cooperativa
COPACO ARCHITETTURA & INGEGNERIA SRL
COPRAT Cooperativa di Progettazione e Ricerca Architettonica, Territoriale e Tecnologica
CREW Cremonesi Workshop SRL
DBA PRO S.p.A.
DINAMICA srl
DUEGIELLE srl
DUOMI Srl
E.D.IN. S.r.l. - società di ingegneria
ECOSTUDIO srl

ECOTEC ENGINEERING SRL
EEMAXX ENGINEERING srl
ENSER s.r.l. Società di Ingegneria
ESA engineering srl
ETACONS s.r.l.
ETATEC STUDIO PAOLETTI S.r.l.
ETC Engineering s.r.l.
ETS srl a Socio unico
European Engineering - Consorzio Stabile di Ingegneria
EUROPROGETTI s.r.l.
EXENET s.r.l.
EXUP s.r.l.
F&M Ingegneria S.p.A.
FERROTRAMVIARIA ENGINEERING SpA
FIMA Engineering s.r.l.
finepro s.r.l.
FRED Engineering srl
GENERAL PLANNING s.r.l.
GIT GRUPPO INGEGNERIA TORINO srl
GVG Engineering Srl
HMR s.r.l.
HYDEA S.p.A.
HYDRO ENGINEERING S.S. DI DAMIANO E MARIANO GALBO
HYDROARCH s.r.l.
HYDRODATA S.p.A.
I.G.&P. - Ingegneri Guadagnuolo & Partners s.r.l.
I.SI. ENGINEERING Srl
ICIS s.r.l. - Società di Ingegneria
ICON INGEGNERIA SRL
ICONIA INGEGNERIA CIVILE srl
IMPEL SYSTEMS s.r.l.
INART srl
INCICO SpA
INGEGNERI RIUNITI S.p.A.
INGEGNERIA E SVILUPPO I.E.S. srl
INTEGRA AES srl
IRD Engineering s.r.l.
ITALCONSULT S.p.A.
ITALFERR S.p.A.
ITEC engineering s.r.l.
Keios srl Development Consulting
LA SIA S.p.A.
LENZI CONSULTANT s.r.l.

LEONARDO srl
LICCIARDELLOPROGETTI Società di Ingegneria srl
LS STUDI E SERVIZI SRL
MACCHIAROLI & PARTNERS s.r.l.
MAIN - MANAGEMENT & INGEGNERIA SpA
MAJONE&PARTNERS srl
MITO Ingegneria srl
MM S.p.A.
NO.DO. E SERVIZI SRL
NORD_ING s.r.l.
OFFTEC SRL
ONE WORKS SpA
OPEN PROJECT s.r.l. Consulenza e Progettazione
OPERA Engineering S.r.l.
PACE & PARTNERS srl
POLIS srl
POLITECNICA - INGEGNERIA E ARCHITETTURA - Società Cooperativa
PRO ITER - Progetto Infrastrutture Territorio s.r.l.
PROGER S.p.A.
PROGETTI E SERVIZI S.r.l.
PROGIN S.p.A.
PROMEDIA srl
PROTECO engineering s.r.l.
R & P ENGINEERING SRL
RECCHIENGINEERING SRL
RINA CONSULTING S.p.A.
S.I.N.A. Società Iniziative Nazionali Autostradali S.p.A.
S.J.S. ENGINEERING s.r.l.
S.T.E. Structure and Transport Engineering s.r.l.
SAB s.r.l.
SAGLIETTO engineering s.r.l.
SEINGIM GLOBAL SERVICE
SEPI s.r.l. Studi Esecuzione Progetti Ingegneria
SERTEC s.r.l.
SERVIZI INTEGRATI s.r.l.
SICON OIL & GAS SpA
SIDERCAD S.p.A.
SIGEA DI ARBORE PIERLUIGI S.A.S. S.T.P.
SiiA srl
SIM Società Italiana di Monitoraggio S.r.l.
SINERGO SpA
SINT Ingegneria s.r.l.
SINTAGMA s.r.l.

SINTEL Engineering srl
SIPAL SpA
SITEC engineering s.r.l.
SPER SRL
SPI SRL
STEAM s.r.l.
STECI s.r.l.
STUDIO AMATI s.r.l.
STUDIO FC & RR ASSOCIATI
STUDIO GEOTECNICO ITALIANO s.r.l.
Studio KR e Associati s.r.l.
STUDIO MARTINI INGEGNERIA S.r.l.
STUDIO MUZI & ASSOCIATI - società di ingegneria a r.l.
STUDIO ROSSO INGEGNERI ASSOCIATI S.r.l.
STUDIO SPERI Società di Ingegneria s.r.l.
Studio TECHNE' s.r.l.
Studio Tecnico GRUPPO MARCHE
STUDIOSILVA s.r.l.
SWS Engineering S.p.A.
SYLOS LABINI INGEGNERI E ARCHITETTI ASSOCIATI SRL
T.E.C.N.I.C. S.p.A. Tecniche e Consulenze nell'Ingegneria Civile Consulting Engineers
TAU Egnineering s.r.l.
TEAM Engineering S.p.A.
TECHNIP ITALY DIREZIONE LAVORI SPA
TECHNIP ITALY S.p.A.
TECHNITAL S.p.A.
TECNOSISTEM SPA
TECNOTEK S.r.l.
TECON srl
TONELLI INGEGNERIA SRL
TRACTEBEL ENGINEERING srl
V.D.P. S.r.l. Progettazione Integrata Ambiente
VITRE STUDIO SRL
WEBUILD SpA - Divisione Ingegneria
ZIMATEC Studio Associato di Ingegneria

PHOTO GALLERY

3TI PROGETTI

ARTELIA
Passion & Solutions

ITALFERR
GRUPPO FERROVIE DELLO STATO ITALIANE

TECHNITAL

POLITECNICA
BUILDING FOR HUMANS

RINA

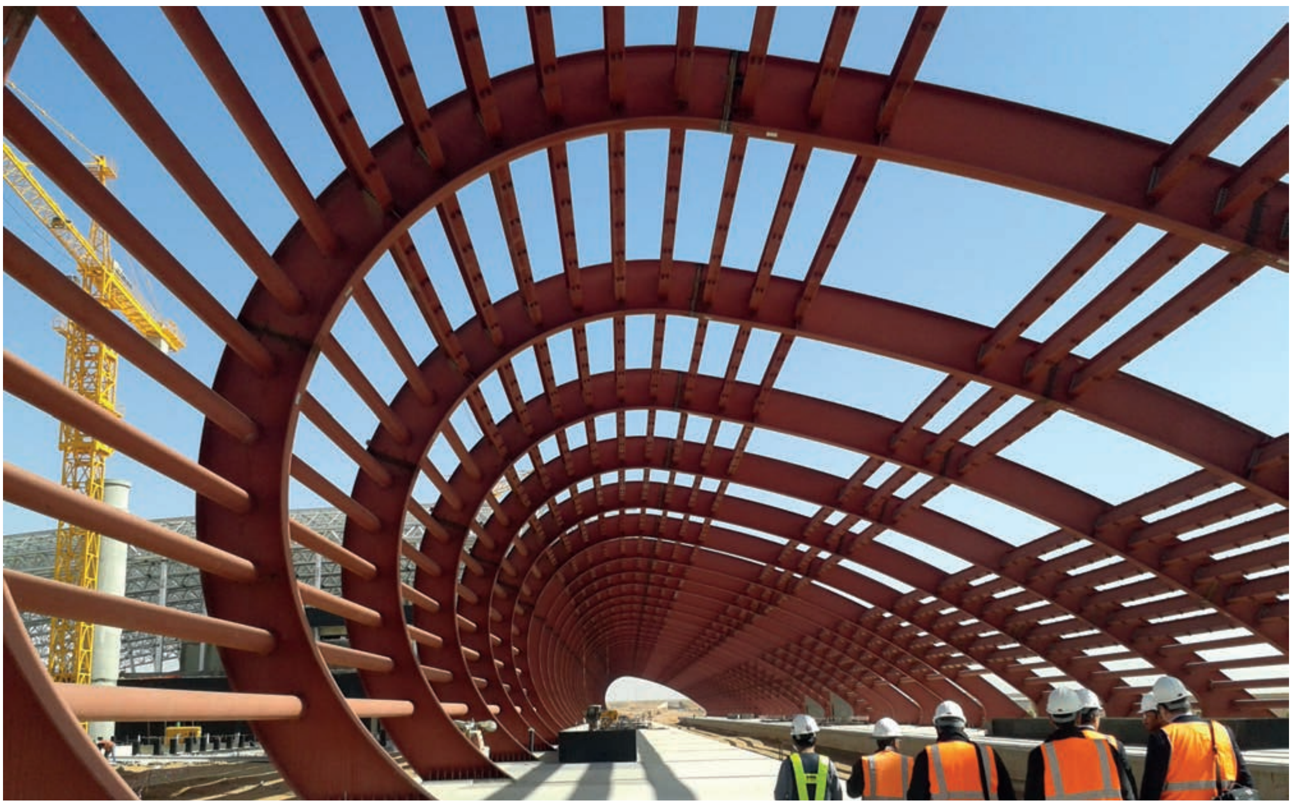
- **3TI PROGETTI**
- **ITALY**
- **HUMAN TECHNOPOLE HEADQUARTERS&CAMPUS - MILAN**

- **3TI PROGETTI**
- **ROMANIA**
- **INTERNATIONAL HENRI COANDA “OTOPENI” AIRPORT - LANDING TAKE-OFF RUNWAY NO. 2**

- ARTELIA
- LYBIA
- NOC HEADQUARTERS BENGHAZI

- ARTELIA
- SWITZERLAND
- ILO HEADQUARTERS GENEVA

- **ITALFERR SPA**
- **ITALY**
- **REGGIO EMILIA AV MEDIOPADANA RAILWAY STATION**



- **ITALFERR SPA**
- **SAUDI ARABIA**
- **SAUDI ARABIA RAILWAY STATION UNDER CONSTRUCTION**

- **POLITECNICA INGEGNERIA ED ARCHITETTURA S.C.**
- **BELIZE**
- **SIXTH ROAD COASTAL HIGHWAY**

- **POLITECNICA INGEGNERIA ED ARCHITETTURA S.C.**
- **MALTA**
- **TOWNSQUARE MIXED-USE DISTRICT**

- **RINA CONSULTING**
- **NETHERLANDS**
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- **TANZANIA**
- **DESIGN REVIEW, CONSTRUCTION SUPERVISION OF A STANDARD GAUGE RAILWAY LINE LOT 1,2,5**

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- **WASTE WATER COLLECTION AND TREATMENT SYSTEMS FOR THE LAKE OF GANV**

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