

# INVESTMENT IN TRANSPORT INFRASTRUCTURE AS KEY DETERMINANT TO BOOSTING TECHNOLOGICAL–INDUSTRIAL DEVELOPMENT ZONES IN REPUBLIC OF MACEDONIA

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## **Abstract**

Transport infrastructure represents one of the most important human activities in each country. It is an indispensable component of the economy and plays a major role in spatial relations between locations, countries and major geographic areas. Transport infrastructure is highly effective to manage and planning Foreign direct investment (FDI) location choices.

In order to create a favorable investment environment and to encourage foreign investors to invest in Macedonia, in last decade was paid especially attention to modernize road infrastructure and rehabilitation of existing roads, especially at the time when our country was the center of attention of foreign investors. Within this context, specific attention is paid on transport infrastructure abilities to improve their environmental and socio-economic performances of attracted the investigations in Technological–Industrial Development Zones (TIDZs). Technological–Industrial Development Zones (TIDZs) have been developed during the last two decades in many regions in the country to foster economic development and reduce the rate of unemployment.

This paper presents structural analyzing study from Macedonian's experiences on Technological–Industrial Development Zones (TIDZs), encompassing ambitious industrial projects to boosting economic development in regional and state aspect. The main focus are given for four Technological Industrial Development Zones, based on location factors abilities and economic developed criteria, different combinations of transport infrastructures measures, business models and best practices and experiences.

**Key words: transport infrastructure, FDI, Technological Industrial Development Zones (TIDZs)**

## **1. Introductions**

The Key question in every country is to take action in order to resolve unemployment through the creation of jobs. Expectations of developing and emerging countries are that the entry of foreign direct investment (FDI) will be able to solve more problems in their decades of failed economic policies. Countries require different examples of different experiences in the world: cheap labor forces, better administrative convenience to investors, reducing, fascinated or complete exemption in the payment of contributions for employees and state governments. But despite all the “attractions”, some countries (including Macedonia) cannot get out of the enchanted circle of low level of foreign direct investment.

Countries or regions that have a low stage of competitive development will adopt a technological catch-up strategy by attracting as much Foreign Direct Investments (FDIs) as possible whereas countries or regions that have achieved a higher stage of economic development will focus to attract innovative and knowledge-intensive activities. Economic zones, namely Industrial Park (IP), Special Economic Zone (SEZ), EcoIndustrial Park (EIP), Technology Park (TP), and Innovation District (ID), are promoted by national, regional, and local governments to spur economic growth and competitiveness.

One of instruments to attract FDI, R. Macedonia expect in Technological–Industrial Development Zones (TIDZs). The vision of TIDZs are decreasing the unemployment by giving support for the high technological and propulsion companies, as well as motivating and stimulating them to start their own business and to accomplish their business ideas. The main targets are to support research processes, innovation, and boosting environmental policy makers with recommendations to the implementation of innovation in research and development, economy and society. Technological–Industrial Development Zones (TIDZs) are centers in which highly productive clean manufacturing activities are concentrated and new technologies are developed. Especially, the Government enforced to attract production activities companies, activities from the IT area (software development, hardware assembling, digital recording, computer chips and the like), scientific research activity and new technologies with high environmental standards, for which additional benefits are envisaged in the TIDZs.

In order for Technological-Industrial Development Zones to give their maximum benefits in attracting FDI, it is necessary to construction a quality transport infrastructure. The transport infrastructure such inevitable bloodstream of the every country is one of the main conditions for the economic development of the country. Therefore investment in new industrial and technological areas cannot be imagined without adequately sized and quality road network. Moreover, in this paper is analyzed also a set of positive impacts and feedbacks from existing or planned Technological–Industrial Development Zones along with a special dedication to the construction of road infrastructure. Lessons learned from best practices are summarized and recommendations are made to advice zones developer, operators and stakeholders on how to design and manage industrial zones or urban areas towards economic benefiting, like as employment growth, higher export participation, regional harmonization and utilization of domestic capacity in economic development.

The paper is organised in five sections following this introduction, as follows: Section 2 considers meaning of Technological Industrial Development Zones for economic development and categorization of main groups. Section 3 discussed transport infrastructure abilities and conditions and meaning of location the TIRDz. Section 4 gives an overview about investmen

activities on transport infrastructure to boosting FDI in TIRDz. Section 5 is dedicated to conclusions and meaning of transport infrastructure to development of TIRDz.

## **2. Meaning of Technological Industrial Development Zones for economic development**

For developing countries, special economic zones (SEZs) traditionally have had both a policy and an infrastructure rationale. In terms of policy, the SEZ can be a useful tool as part of an overall economic growth strategy to enhance industry competitiveness and attract foreign direct investment (FDI). Through SEZs, governments aim to develop and diversify exports while maintaining protective barriers, to create jobs, and to pilot new policies and approaches (for example, in customs, legal, labor, and public-private partnership aspects). SEZs also allow for more efficient government supervision of enterprises, provision of off-site infrastructure, and environmental controls. SEZs are generally defined as geographically delimited areas administered by a single body, offering certain incentives (generally duty-free importing and streamlined customs procedures, for instance) to businesses which physically locate within the zone.[1].

Ordinary propositions uses the term 'special economic zone' (SEZ) to encompass all forms of a geographically demarcated area within a country, which functions with different administrative, regulatory and fiscal regimes to the rest of the country. The different rules applied in these zones usually concern investment conditions, taxation and international trade regulations and typically aim to ensure that the business environment in demarcated zones is both more liberal from a policy perspective, and that rules applied are more efficient from an administrative perspective than those prevailing in the rest of the domestic economy [2], [3]

Another major point concern with SEZs is the process of dynamism. Economic zone programs that are successful in contributing to long-term development go beyond the static benefits of attracting investment and generating employment. They leverage these static benefits for the creation of *dynamic economic benefits*. Ultimately, this means contributing to structural transformation of the economy, including diversification, upgrades, and increased openness. [4].

According to the World Bank recommendations, accurate functional positioning will allow SEZs to maximize their contribution according to their strengths and comparative advantages. In general, SEZs can pilot and test institutional innovations, while free-trade oriented zones can experiment with financial models to attract investment. Joint intercity and port development zones can leverage resource sharing and clustering for regional development. Industry clustering can take advantage of geographic location and resources. Evidence suggests that such zones are a much more significant source of employment in smaller countries with populations of less than 5 million (examples include Mauritius, the Seychelles, Jamaica, Macedonia) than in larger countries.[5].

The special economic zones (SEZs) can be an effective instrument to promote industrialization if implemented properly in the right context, as shown in some of the emerging countries, particularly those in East Asia. More and more countries have begun to implement this instrument for their industrialization process, especially as a way of attracting foreign direct investments (FDIs) mostly in the manufacturing sector, creating jobs, generating exports and foreign exchanges, and so on. So far, the results are quite mixed with some countries quite successful such as China, Singapore, Malaysia, South Korea, Jordan, Mauritius, etc., and others still struggling, in particular those in Sub-Sahara Africa (SSA).

The first “modern zone” was established in United States in 1945, than the number of zones worldwide has multiplied rapidly. The first modern industrial free zone in developing country was established in Shannon, Ireland in 1959, followed by Kaoshiung EPZ in Taiwan in 1962.

Since then, a variety of different zone as well as the concept was massively adopted by developing countries as an economic development strategy in the 1970s and in the 1980s. The total number of SEZs in the world has increase from 9 at the end of the 1960s to 107 in 51 developing countries at the end of 1987 [6]. In 1986, the ILO reported 176 zones in 47 countries; by 2006 this rose to 3,500 zones in 130 countries. Despite the continued proliferation of zones around the world, they have had a mixed record of success. Past research on zones shows that many have been successful in generating exports and employment, and most are net positive, if only marginally, in cost-benefit assessments. However, most economists still view zones as a “second best” solution to competitiveness, whose success is restricted to specific conditions over a limited timeframe. However, there are a number of examples of zones playing a catalytic role in processes of economic growth and adjustment processes, particularly in the East Asian “tiger economies” during the 1980s and in China since the early 1990s, but also in Latin America.[7].

In 2015, there were roughly 4,500 Special Economic Zones (SEZs) in 140 countries employing around 66 million people in the world. Only in China are engaged more than 30 million of those workers are employed in China. SEZs account for more than US\$ 200 billion in global exports.

It is estimated that there are more than 1,000 economic zones in the ASEAN (893 industrial parks, 84 special economic zones, 2 eco-industrial parks, 25 technology parks, and 1 innovation district). The members have thus adopted different economic zones’ strategies to strengthen their competitiveness. Viet Nam has widely relied on industrial parks to attract FDIs. Singapore has designed one-north Singapore, the first innovation district in the ASEAN.[8].

There are a growing number of SEZs with differing objectives, markets and activities. In addition, SEZs with similar characteristics are referred to differently from country to country. A comprehensive mapping and definition of different types of SEZs was not possible within the scope of this paper, but would merit further work. Broadly SEZs can be grouped into the following main categories:[9].

- **Free Trade Zones (FTZ)**, also known as commercial free zones. FTZ are a widespread type of SEZ located mostly along seaports, airports, major roads and railroads, or in border regions. FTZs are typically small, fenced-in, duty-free areas, offering warehousing, storage, and distribution facilities for trade.

*Enterprise zones* are intended to revitalize distressed urban or rural areas through the provision of tax incentives and financial grants.

*Freeports* typically encompass much larger areas. They accommodate all types of activities, including tourism and retail sales, permit on-site residence, and provide a broader set of incentives and benefits.

*Single factory EPZ* schemes provide incentives to individual enterprises regardless of location; factories do not have to locate within a designated zone to receive incentives and privileges.

*Specialized zones* include science/technology parks, petrochemical zones, logistics parks, airport-based zones, and so on.

- **Export Processing Zones (EPZ)** usually offer special incentives and facilities for manufacturing and related activities aimed mostly at export markets. In some countries industrial zones or parks fulfil these criteria, while in other countries industrial zones or parks mainly focus on the domestic market and may offer limited incentives. EPZs also increasingly include the provision of services that can be delivered remotely through digital networks, such as the capturing and processing of digital data and call centres. Such EPZs are sometimes also

referred to as technology parks. Another variety of EPZ is the single factory EPZ, which provides incentives to individual companies regardless of their location.

Also in practice [Derived from FIAS (2008) and Farole (2011)] there are and others classification: free trade zone (commercial-free zone); traditional zones; free enterprises (single unit EPZ); hybrid EPZ; Freeport/SEZ. [4].

According to UNDP [10], it can find and categorization Multi-purpose zones.

- **Multi-purpose zones** (MPZ) also often referred to as 'free ports' are generally a much broader concept and typically encompass much larger areas— up to whole cities. They accommodate different types of activity, including manufacturing, housing, tourism and retail and provide a broad set of incentives and benefits.

It is a very positive fact that the foreign investments stimulate the growth of domestic companies which are engaged in some way in the development and the regulation of the industrial zones. The positive results of the concept of economic development are already felt in many regions especially developing countries. After the implemented activities and the introduction of the international standards, the companies with foreign investment capital will further focus professional efforts towards the desired goal: continue toward more economic and sustainable development of the region.

### **3. Transport infrastructure as well the key determinant to attract foreign direct investigation - (FDI)**

Geographical Factors and transport infrastructure are two of the key determinants that influence international competitiveness in every country. The transport infrastructure is the bloodstream of the every country, but quality of such infrastructure and how widespread it is, play an increasingly important role in attract FDI and design of business strategy on competitive sharing of the international market.

Recent OECD research suggests that investment in physical infrastructure (high-speed rail links, airports, waterways and major efforts to improve road infrastructure) can boost long-term economic output by more than other types of investment.[11] The OECD research highlights that infrastructure investment needs to be effectively targeted to maximise overall economic benefits. In addition to making sound decisions on projects, this also depends on having appropriate regulations and price signals in infrastructure markets.

The role of transport in decisions made by businesses on where to locate or relocate is a crucial element in our ability to assess the impact of our transport system on people's lives. The review notes that large-scale transport infrastructure policies are likely to be successful in supporting *latent* growth in under-developed regions, but is likely to be ineffective in *stimulating new* growth. Related to this issue is that transport is important in business relocation only when the decision to move has already been taken [12].

Republic of Macedonia is a landlocked country in the middle of the southern Balkan Peninsula, and has a favourable geographic position. Although a landlocked country, Macedonia benefits from a strategic geographical position at the crossroads of two major pan-European transportation corridors (corridors VIII and X) linking Central Europe to the Adriatic and Black Sea.

With a surface area of 25,713 km<sup>2</sup>, the country is one of the smallest in Europe. The country bordering with two EU member states: in the south - Greece and in the east - Bulgaria. The neighbor in the north is Serbia and Kosovo, and Albania in the west. The total length of the border is 849 km, of which the western border is 191 km, the southern, 262 km, the eastern, 165 km and the northern, 231 km in length. The countries bordering Macedonia provide an

actual and potential consumer market about 30 million people. As a whole, South Eastern Europe is a market of over 80 million persons.

The country's topography is very diverse, and is represented by mountains, valleys, ravines, narrow gorges, saddles and other forms. The average elevation of the mountain massifs is 850 metres above sea level and more than 30 per cent of the land area is above 1000 metres.

The border cross issue is depending mainly on the successful implementation of the modernization of customs regulations, improvement and operability of the cross border buildings, enhancement of the battle against smuggling, corruption and illegal human trade. The other issues are mostly related with the interaction between the public and private sector and strengthening of the regional cooperation.

The number of official border crossings in the Republic of Macedonia towards the neighboring countries is:

- a) 15 road border crossings:
  - 3 with Bulgaria (Deve Bair near Kriva Palanka, Novo Selo near Strumica, and Delcevo);
  - 3 with Serbia (Tabanovce, Sopot and Pelince near Kumanovo);
  - 2 with Kossovo (Jazince near Tetovo; and Blace near Skopje);
  - 3 with Greece (Bogorodica near Gevgelija, Medzitlija near Bitola, and Star Dojran near Dojran); and
  - 4 with Albania (Stenje near Resen, Sveti Naum near Ohrid, Kafasan near Struga, and Blato near Debar).
- b) 3 railway border crossings:
  - 2 with Serbia (Tabanovce near Kumanovo, and Volkovo near Skopje);
  - 1 with Greece (Bogorodica near Gevgelija).
- c) 2 airport border crossings in Skopje (Alexander the Great Airport) and Ohrid (St. Paul the Apostle Airport).

**Table 1 Distances from Skopje to major destinations in Balkans countries**

| Country                           | Distance in km |
|-----------------------------------|----------------|
| Zagreb ( Croatia)                 | 815 km         |
| Sarajevo (Bosnia and Herzegovina) | 450 km         |
| Belgrade (Serbia)                 | 420 km         |
| Sofia (Bulgaria)                  | 250 km         |
| Tirana (Albania)                  | 230 km         |
| Prishtina (Kosovo)                | 90 km          |
| Thessalonica (Greece)             | 230 km         |
| Athens (Greece)                   | 700 km         |

*Border crossings*

According to the National Strategy for Integrated Border Management, categorization is carried out at border crossings in regards to their operational capacity (current and prospective). Improving the throughput of the crossings, with full respect to the previously mentioned concept of " accessible but secure borders and "Schengen best practice" in this country are

implementing the concept of "Single Window" and "One-Stop-Shop". By applying these concepts, will greatly reduce the waiting time at the crossings as well as their transfer, which will produce major positive economic effects. Some of the issues in the near future will be placed among others:

- The harmonization of customs procedures with neighboring countries
- The harmonization of categorization of the borders with neighbors.

**Table 2 Road Network of the Republic of Macedonia**

| Type of Road          | km            |
|-----------------------|---------------|
| International E roads | 553           |
| National roads        | 908           |
| Regional roads        | 3.778         |
| Local Roads           | 9.513         |
| <b>Total</b>          | <b>14.199</b> |

Source: State Statistical Office of the Republic of Macedonia: Transport and others services 2014. Skopje, 2014.Nr. 8.4.15.02.p.50.

The development of border crossings depends largely on successful implementation and modernization of customs legislation, improving the operation of border crossings and intensifying the fight against smuggling, corruption and trafficking of human beings, respecting the basic principles of "accessible but secure borders". Other issues in greater extent are related to the interaction between public and private sector and strengthening of regional cooperation.

Road transportation infrastructure of the Republic of Macedonia is characterized by relatively high density, exceptions being the highways. At the moment, Macedonia's road network totals about 14.199 km, out of which 908 km are national roads, 3.778 km are regional and 9.513 km are local roads.

**Table 3 Condition of the roads**

|                   | km   | Good | Medium | Poor |
|-------------------|------|------|--------|------|
| Motorway (M 2x2)  | 259  | 60%  | 30%    | 10%  |
| Magistral (M 1x2) | 908  | 60%  | 30%    | 10%  |
| Regional 1 (R1)   | 3778 | 45%  | 27%    | 28%  |
| Regional 2 (R2)   |      | 20%  | 30%    | 50%  |
| Gravel (R2)       | 9513 | -    | 50%    | 50%  |

Major part of national roads or 553 km are included in the European roads "E" system, while only 259 km of motorways may be included in the TEM (Trans– Europe Motorway) system of roads, these being: Border R.Serbia - Kumanovo - Petrovec - Veles - Gradsko -Negotino - (to

Demir Kapija); Skopje - Petrovec; Hipodrom-Miladinovci; Skopje (Saraj) - Tetovo; Tetovo - Gostivar. Out of the total length of categorized national and regional road network, 259 km (5.2%) are at motorway level, 393 km (7.9%) are with tracks width of 7 meters or more, 343 km (6.9%) are of tracks width of 7 meters and less, 1758 km (35.3%) have width bigger than 5.5 meters, 348 km (7.0%) are of width ranging from 4.5 and 5.5 meters, 1006 km (20.2%) with width less than 4.5 meters and 871 km (17.5%) are with earth tracks.

Considering the small size of the country and its population, the road network size is mostly adequate, with little or no need for expansion. The network is not in good condition; about 50 % of national roads are poor.

Rather poor level of the road infrastructure quality contrasts sharply with the high relative importance of this mode of transportation in the Republic of Macedonia. Road transportation namely accounts for by far the largest share of total transportation of goods and passengers in the country. Within the structure of all goods transported on the roads, internal transport participates with a dominant share while the rest is being distributed between international transport and transit. As far as passenger transportation is concerned, road transportation is even more dominant, as only a negligible per cent of all passenger travels in the country is done by railways.

The national road network consists of four (4) roads (A-1 to A-4). Most national roads consist of two traffic lane carriageways. Two of the national roads are in concordance with the Pan-European Corridors as well as European road network A-1 (E-75) and A-2 (E-871, E-65, E-852) are in concordance with Corridors X and VIII respectively. Other national roads form part of important international links, for example, A-3 (link between A2-E-852 and R. Bulgaria), A-4 (link between R. Bulgaria and Kosovo). The two Trans National Axes (Corridors VIII and X) that cross the country are important because they support the easy movement of people and goods within the country and also provide connections to regional neighbors and further to all other European Countries

Further development of the transport sector will contribute towards competitiveness of the national economy and balanced regional development. The relatively poor quality of the road network contrasts sharply with the high relative importance of the road transport in Macedonia. This is because road transport accounts for by far the largest share of total carriage of goods and passengers in the country.

**Table 4. Local road network - Basic indicators according statistical regions**

|      | Republic of Macedonia | Vardar Region | East Region | Southwest Region | Southeast Region | Pelagonia Region | Polog Region | Northeast Region | Skopje Region |
|------|-----------------------|---------------|-------------|------------------|------------------|------------------|--------------|------------------|---------------|
| 2013 | 9471                  | 1005          | 1187        | 1278             | 888              | 1211             | 1483         | 1035             | 1384          |
| 2014 | 9513                  | 1006          | 1187        | 1296             | 893              | 1214             | 1498         | 1056             | 1363          |
| 2015 | 9570                  | 1013          | 1186        | 1308             | 902              | 1215             | 1520         | 1058             | 1368          |

In 2015, the local road network with the greatest length of 1 520 km (or 15.9% of the total road network) was in the Polog Region, while the shortest length of 902 km (9.4%) was in the Southeast Region. In 2015, in road passenger transport, the most passengers (25.7%) were transported in the Skopje Region, while the smallest percentage of transported passengers was in the Pelagonia Region (6.0%). In taxi transport, in 2015, the most passengers (31.7%) were transported in the Skopje Region, while the fewest passengers were transported in the Vardar Region (3.4%).





## 4. Investments in road infrastructure to boost technological industrial development zones

Undoubtedly a seriously problem in the implementation of future production and transportation projects is financing. The construction of transportation infrastructure requires large investment funds, especially FDI (Foreign Direct Investment). In most developed countries present hunger for investment in infrastructure. FDI has a consistent positive impact on productivity, and countries should continue to pursue policies aimed at attracting FDI. In addition, it is important to understand whether and which economic conditions affect the size of the benefits associated with FDI inflows. Studies on productivity growth have underlined the importance of absorptive capacity, and tacit knowledge in particular, which may enhance the transfer of technology and thereby strengthen the impact of FDI on productivity growth. The emphasis on absorptive capacity is based on the idea that the potentially positive impact of FDI on the receiving economy may fail to materialize if domestic companies lack sufficient abilities to imitate and adopt superior technologies used by foreign firms. This capacity to absorb technology depends on a wide range of factors, such as levels of basic technological literacy and advanced skills or on the quality of the business environment in general. Absorptive capacity can be measured in various ways, for example on the basis of human capital indicators or using the relative productivity level [13].

The interdependence between needed FDI and economic growth in developing countries has many theoretical foundations. As demonstrated by Borensztein et al., [14], this relationship can be derived using the framework of international technology diffusion developed by Barro [15] and drawing on seminal contributions to the theory of endogenous growth by Romer [16].

Infrastructure is one of the main conditions for the economic development in Republic of Macedonia, and therefore investment in new roads and rehabilitation of existing roads is important, especially at the time when Macedonia was the center of attention of foreign investors. Investment in Macedonia's transport infrastructure and reform of infrastructure markets is critical to improving national productivity. Well-performing infrastructure will help drive a more diverse, competitive and sustainable economy that generates substantial and lasting economic, social and environmental benefits. Therefore, in the coming period in Republic of Macedonia with the process of the construction will cover the following three highways: Skopje-Stip, Kicevo-Ohrid and Demir Kapija-Smokvica, and also for a number of regional roads.

It is estimated that the investment cycle in road infrastructure will be overpassed and exceeds one billion euros of which 790 million are only three charter main highways. Besides Corridor 10, currently being built and highways of Miladinovci to Stip (A4), and Kicevo to Ohrid (A2) which will have a multiplier effect on the Macedonian economy. Besides the construction of new, at this moment runs and rehabilitated and rebuilding old roads. After the construction of the Strumica - Radovis road, and the express road Radovis - Stip, the economic competitiveness will improve. Initially, a Motorway was proposed to connect Shtip and Radovish, and on towards Strumica. The Motorway was to be a dual carriageway (2-traffic lanes and a hard shoulder in each direction), wider and a faster design speed (120 km/h). With the final construction of this important arterial road, will provide the communication link with the capital Skopje. The construction of the Stip-Skopje highway will also contribute to this, therefore people will be able to arrive to Skopje from Strumica in less than an hour and a half. This will enable the region of Southeast Macedonia to develop and thus improve the competitiveness among the companies.

In the next two years will be running the new 63 kilometer road network worth 32 million and 680 thousand euros. These three highways, along with other local and regional roads to be built and reconstructed in the period from 2014 to 2018, represent an investment of over one billion

euros. Such investment wave in the area of road infrastructure has ever happened in the country.

Infrastructure investment directly increases the volume and quality of Macedoni's physical capital stock and facilitates enhanced private sector activity. By increasing the amount and quality of capital workers have available, infrastructure investment plays a key role in supporting labour productivity. Infrastructure can facilitate trade and the division of labour, improve market competition, promote a more efficient allocation of activity across regions and countries, encourage the diffusion of technology and the adoption of new organisational practices, and provide access to new resources. Public infrastructure investment can contribute to more productive public sector service delivery. The IMF estimates that, on average across 22 OECD countries, increasing the public infrastructure stock by 1 per cent leads to an increase in output of around 0.2 per cent [17].

The positive effects of investment in road infrastructure already feel because of their construction involved over 1,500 Macedonian workers. In the next three to four years are expected higher economic growth, and greater number of employment in the engagement of domestic workers.

Road construction will encompass modernization of the road infrastructure in the eastern part of Macedonia and the south-east part of the country linking to the highway from Skopje to Stip, coupled with the construction of several additional roads which is commenced or is planned to commence.

The backbone of the country's road network is the two Pan-European Corridors No X and VIII. According to the legislation, provision of resources for construction and maintenance of the road infrastructure in Republic of Macedonia is under the responsibility of the Fund. The investment funds have been financed primarily through the National Budget; their composition is for a large part international loans and grants, a small part coming from car registration taxes, excises on fuels, toll road charges. New projects and network maintenance are carried out according to the Public Investment Projects s annual updates (PIP).

## 5. Conclusions

This focus of this paper is on transport infrastructure and its role in boosting investigation in Technological–Industrial Development Zones (TIDZs). When carefully integrated with land use planning, transport infrastructure has the potential to leverage the public's infrastructure investment to achieve other complementary benefits. Undoubtedly infrastructure investment can be synergistic by targeting and attracting other complementary public and private sector investments, thereby generating wider benefits to stakeholders and the surrounding community. The IMF estimates that, on average across 22 OECD countries, increasing the public infrastructure stock by 1 per cent leads to an increase in output of around 0.2 per cent.

Another major point concern with Zones is the process of dynamism. Economic zone programs that are successful in contributing to long-term development go beyond the static benefits of attracting investment and generating employment. They leverage these static benefits for the creation of *dynamic economic benefits*. Ultimately, this means contributing to structural transformation of the economy, including diversification, upgrades, and increased openness. Zones have a long-established role in economic development and boosting international trade. Before the 1970s, most zones were clustered in industrial countries. But since the 1970s, starting with East Asia and Latin America, zones have been designed to attract investment in labor-intensive manufacturing from MNCs. These zones became a cornerstone of trade and

investment policy in countries shifting away from import-substitution policies and aiming to integrate into global markets through export-led growth policies.

One of instruments to attract FDI, R. Macedonia expect in Technological–Industrial Development Zones (TIDZs). The vision of TIDZs are decreasing the unemployment by giving support for the high technological and propulsion companies, as well as motivating and stimulating them to start their own business and to accomplish their business ideas. In order for Technological-Industrial Development Zones to give their maximum benefits in attracting FDI, it is necessary to construction a quality transport infrastructure. The transport infrastructure such inevitable bloodstream of the every country is one of the main conditions for the economic development of the country. Therefore investment in new industrial and technological areas cannot be imagined without adequately sized and quality road network. Undoubtedly, further development of the transport sector will contribute towards competitiveness of the national economy and balanced regional development. It is expected that well-performing infrastructure will help drive a more diverse, competitive and sustainable economy that generates substantial and lasting economic, social and environmental benefits.

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