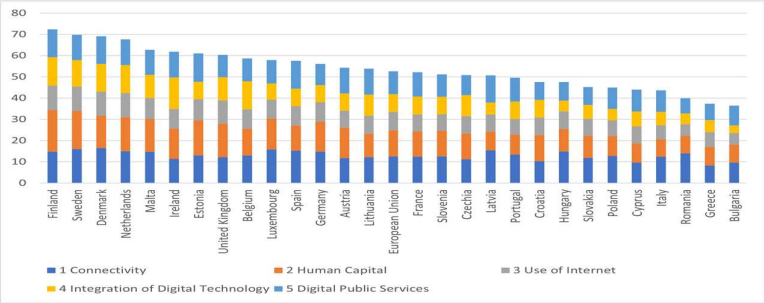
Greece 2021 – Factsheet on Digital Transformation

Key points

- Greece's **digital transformation performance** accelerated substantially during the pandemic, but remains well below EU average according to the latest DESI report from 2020.
- The **pandemic crisis** highlighted the importance of digital infrastructure for a resilient recovery.
- Whilst an extensive application of digital processes in **public administration, healthcare, education, employment and tourism** has been observed since the onset of the pandemic, significant scope remains for both the public and private sectors to exploit further digital infrastructure and technology.
- An ambitious **digital transformation strategy ('Digital Bible')** was adopted in June 2021, outlining strategic priorities, as well as more than 400 projects to be implemented in key areas such as health, justice, finance, environment, and energy. This is expected to underpin Greece's digital transformation efforts over the next 5-year period.
- The **innovative scheme for a National Fund for 5G in Greece**, established through the recently adopted Code of Digital Governance, is expected to play a positive role in the development of the 5G ecosystem.
- The **National Plan for Recovery and Resilience "Greece 2.0"** is a critical factor that can significantly contribute to the further development of both digital governance and the digitalisation of the economy.
- According to the latest overall Digital Economy and Society Index (DESI), Greece ranked second last in the EU. There is potential for significant steps towards advancing digital transformation in Greece.
    - The country's score in terms of **connectivity infrastructure** and level of **digital skills** improved, but performance still lags well behind those of its EU peers.
    - The degree of **digitalisation of businesses** is far below the EU average.
    - The number of internet users is growing and a large percentage of them are keen to carry out a range of online **internet services**.
    - **Digital public services** indicators have started to close the gap with EU peers but remain among the weakest in the EU.

Figure 1. Digital Economy and Society Index (DESI) ranking of EU member states in 2020



Source: DESI 2020, based on the latest 2019 data

I. FACTS & FIGURES

The digital pillar of "Greece 2.0"

- Part of the National Recovery and Resilience Plan "Greece 2.0" is budgeted for the digital transition (Pillar 2), for infrastructure, digital governance projects and the digitalisation of SMEs, and amounts to €2,136 million.
- The Greece 2.0 Plan, however, also contributes to other areas of digitalisation, with additional resources for the implementation of projects totalling 23% of its total budget, e.g., digital transformation in various sectors such as education, health, justice, taxation, etc.
- These measures are embedded in the recently adopted (in June 2021) 5-year digital transformation strategy ('Digital Bible') which outlines strategic priorities, as well as more than 400 projects to be implemented in key areas such as health, justice, finance, environment, and energy.
- The new strategy is expected to underpin Greece's digital transformation efforts over the next 5-year period.

The recovery and resilience plan includes measures concerning:

- projects to digitalise public administration such as the digitisation of public archives, development of cloud infrastructures, interconnection of key systems and registries, improved IT systems for sound financial management and e-procurement, establishment of a data governance policy, and implementation of process simplification and digitalisation,
- the development of smart cities across Greece,
- a voucher scheme to support the acquisition and integration of new technologies by SMEs, in addition to dedicated measures to promote the digital transformation and resilience of key sectors, such as manufacturing, agriculture, tourism, and culture,
- the acceleration of the deployment of very high capacity networks (VHCN), in particular 5G and fibre networks, and the utilisation of space technologies and applications to support secure connectivity services.

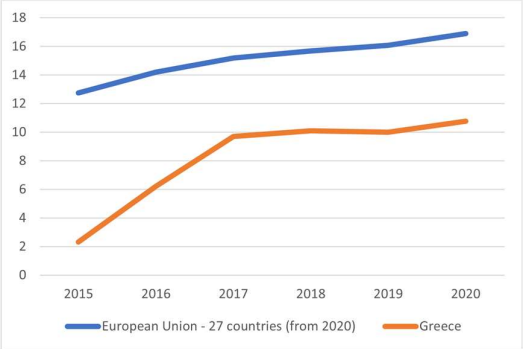
Several other components of the Greek Recovery and Resilience Plan also include substantial digital investments, including:

- digital initiatives aimed at increasing the efficiency of key services, including tax and customs administration, justice, healthcare, social welfare, education and employment services,
- digital upskilling measures to contribute to bridging the digital divide across the population and reduce skills mismatches in the labour market,
- provision of approximately 600,000 school pupils and students in low-income families with vouchers for the purchase of tablets/laptops and the installation of 40,000 interactive learning systems in schools.

Digital transformation in the public sector

The availability of digital public services is well below the EU27 average but illustrates an increasing trend.

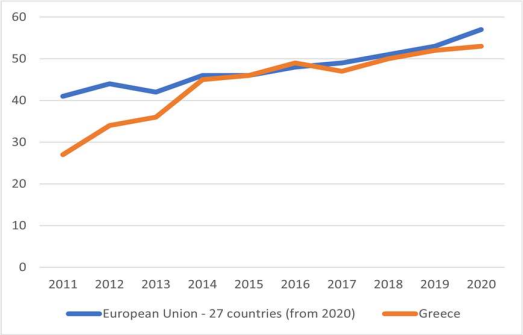
Figure 2. Digital public services (DESI Score)



Source: DESI 2020

- However, the number of individuals that interact with public authorities through the internet has been steadily increasing and falls short of the EU27 average only by a small margin (4%).

Figure 3. Internet use: interaction with public authorities (last 12 months) - Percentage of Individuals



Source: Eurostat

- The digitalisation of the public services has been accelerated with the launch of the governmental portal "gov.gr" by the Ministry of Digital Governance providing more than 1250 e-services.
- The new Digital Code (Law 4727/2020) foresees the establishment of a digital marketplace for cloud services and applications to promote the use of cloud technologies in the public administration and stipulates that digital public services are offered through central cloud computing infrastructures in order to improve innovation and digital transformation. It also establishes an institutional framework for the transactions of businesses and citizens with the state.
- Digital transformation of the public sector is strongly featured in the Recovery and Resilience Plan ("Greece 2.0").

Integration of digital processes in response to COVID-19

In response to the pandemic crisis and the measures taken to minimize its social and economic costs, several digital procedures and projects across several sectors were implemented or expanded. Among others,

In public administration:

- The Ministry of Digital Governance ensured a secured access to Virtual Private Networks for the remote access of critical public services to 10,000 employees and provided a platform for all public bodies to conduct secure and high-quality teleconferences.
- Procedures regarding the issuing of public documents and applications through the gov.gr website, or by applying electronically to other public services such as the Citizens' Service Centres (KEP) and the National Citizen Registry.
- Remote citizen services through portals like myKEPlive, myConsulLive, myAADElive and myOAEDlive.
- e-paravolo can also be issued and paid for in English.

In the healthcare sector:

- Electronic remote prescription system via e-mail, SMS.

- Establishment and operation of the archiving system of the National Register of Coronavirus Patients.
- COVID-19 patient teleconsultation system.
- Operation of the emvolio.gov.gr platform for vaccination planning.
- Operation of the self-testing.gov.gr platform.

In education:

- Remote digital courses across primary, secondary and tertiary levels.
- Distance training and further training of the public administration staff.
- Electronic submission of applications for enrolment in primary education.
- Set up of a digital certificates system.

In labour markets:

- Electronic transactions of the insured persons of the Electronic National Social Security Fund e-EFKA.
- Digital issuance of insurance status.
- Digital appointment services through myOAEDlive.
- e-Consumer platform for the declaration of prices of products.
- The Economic and Development Ministry's communication with consumers through the "Consumer Line" was also enhanced through digital tools.

In the legal system:

- Incorporation of legal procedures through the websites gov.gr and solon.gov.gr.

In culture:

- Digital archives of the theatrical plays for their use by the Ministry of Culture.

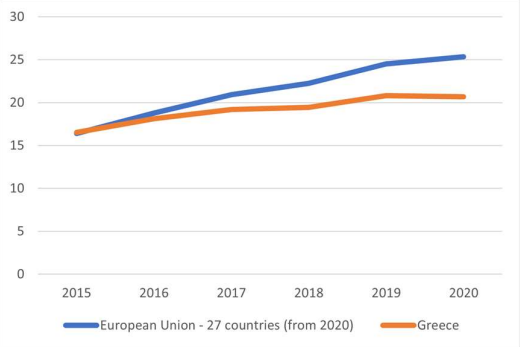
In tourism:

- Incorporation and issuance of the "Green-pass", the European Digital Certificate COVID-19, through the gov.gr portal, creating a secure framework for travel within Europe.

Digital transformation in the private sector

- Despite progress, the pace of businesses' digital transformation in Greece lagged behind the respective EU average in 2020 (referring to 2019 data).
- Greek businesses ranked 24th in the EU regarding the integration of digital technology, compared to 22nd a year earlier.

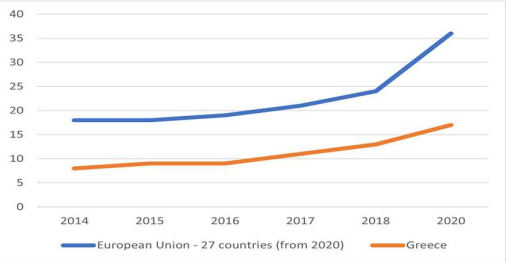
Figure 4. Integration of digital technologies by businesses (DESI Score)



Source: DESI 2020

- Electronic information sharing and use of big data are the areas where Greek businesses perform stronger.
- In contrast, the use of cloud services (by only 17% of firms versus 36% in the EU27) is Greek businesses' weakest digital dimension.

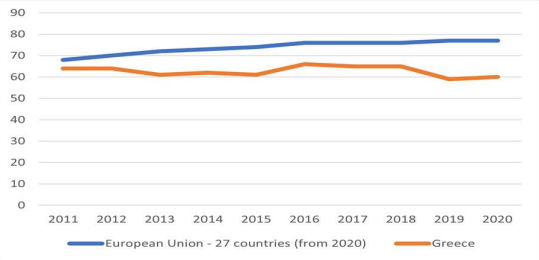
Figure 5. Cloud computing services by businesses (%)



Source: Eurostat

- Greek enterprises are also under-represented on the internet, with the corresponding indicator well below EU27 average.

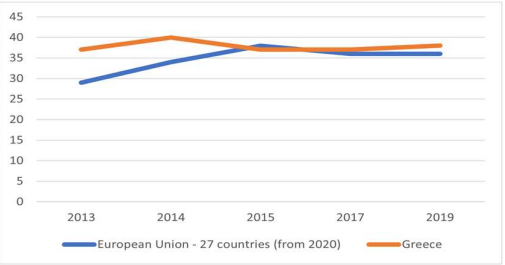
Figure 6. Enterprises with a website (%)



Source: Eurostat

- In contrast, Greek enterprises use Enterprise Resource Planning systems as part of their digital inclusion, more than their EU peers' average.

Figure 7. Enterprises that use ERP software (%)



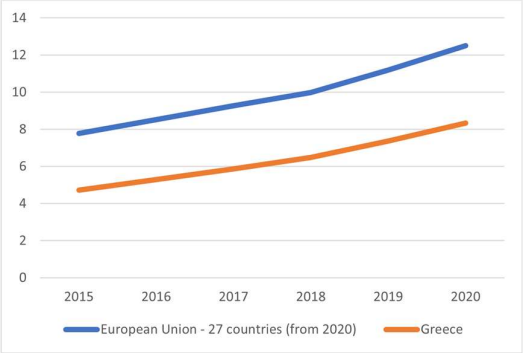
Source: Eurostat

- At the beginning of 2020, Greece had 9 fully operational Digital Innovation Hubs covering various sectors such as agriculture, fishing, construction, manufacturing, transport and electricity through a wide spectrum of advanced technologies such as additive manufacturing, AI and cognitive systems, cybersecurity and blockchain, big data and photonics (Source: DESI 2020).

Digital infrastructure and skills

- With respect to overall connectivity metrics, Greece ranks last among EU countries.
- Indicatively, the country lags behind in the deployment of VHCN, a factor which should improve through the integration of 5G and fibre networks.
    - The new Digital Code introduces the framework and conditions for the development of an ecosystem for the development of 5G applications and services in Greece, including an innovative scheme for a National Fund for 5G in Greece. This aims to channel funds to innovative SMEs, thus helping create a market of 5G products and promoting the development of vertical industries such as transport, logistics and supply chain, manufacturing, utilities, grids and health care.
    - The long-awaited multi-band 5G auction in Greece was concluded in December 2020.

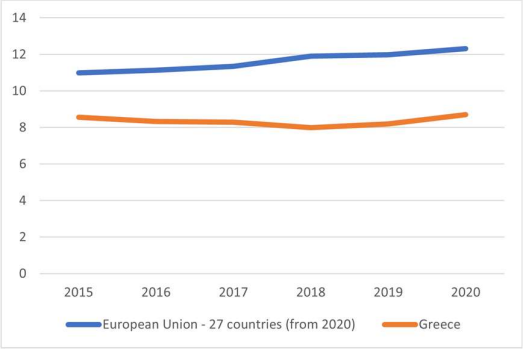
Figure 8. Connectivity (DESI Score)



Source: DESI 2020

- Within the last two years, Greece illustrates a marginally positive trend on the human capital dimension of digital skills measured by DESI, though it ranked only 25th in the EU.
- In 2020 (referring to 2019 data), 51% of individuals between 16 and 74 had at least basic digital skills, narrowing the gap with the EU average from 11 ppts down to 7 ppts.

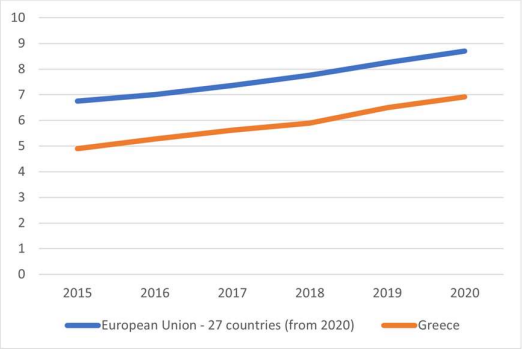
Figure 9. Human capital (DESI Score)



Source: DESI 2020

- The overall use of internet services in Greece remains well below the EU average, while the country ranked 25th in the EU.

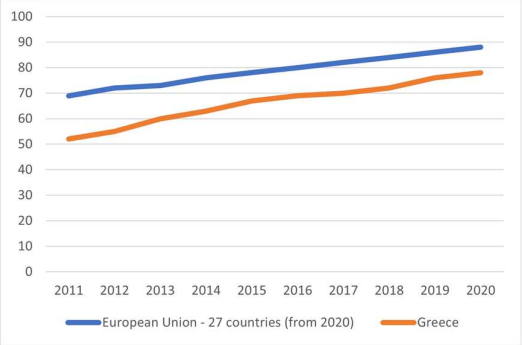
Figure 2. Use of internet services (DESI Score)



Source: DESI 2020

- Similarly, individuals' use of internet is also below the EU27 average.

Figure 11. Use of Internet by individuals (DESI Score)

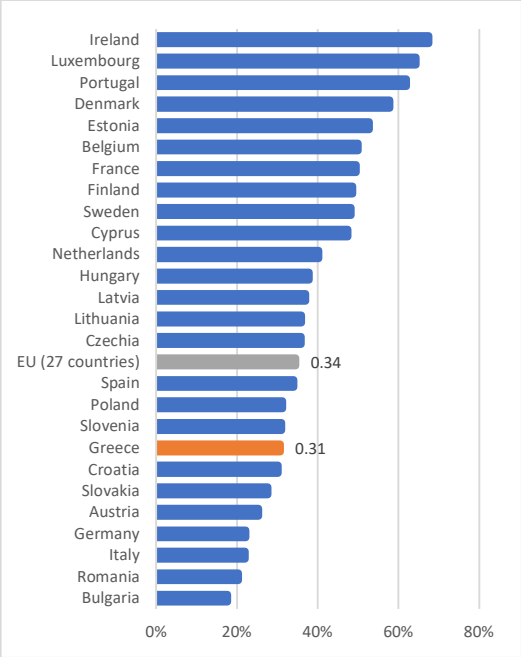


Source: Eurostat

- Nevertheless, the last years illustrate an increasing payment digitalization trend, which can also be attributed to the COVID-19 pandemic on a European level, but also to the 4446/2016 and the 4646/2019 regulation, which introduced measures to promote electronic payments (e.g., tax penalty on households for insufficient electronic payments, compulsory acceptance of electronic payments by businesses, etc.).
- The value of card payments, proportionally to total consumption increased spectacularly from 18.8% in 2019 to 30.7%

in 2020, however remains lower than EU average of 34.5%.

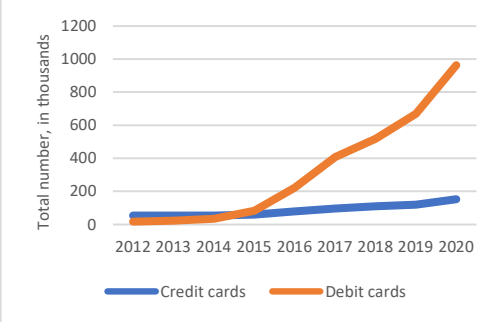
Figure 3. Value of card payments over total consumption (%)



Source: Eurostat, ECB Statistical Data Warehouse

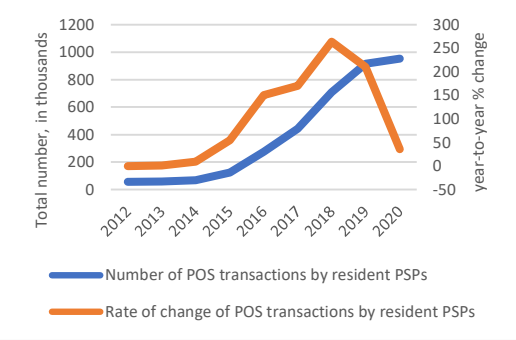
- The number of newly issued cards and Point of Sale (POS) transactions also grew rapidly in the last years (especially Debit cards), explaining the increase in digital payments over total consumption.

Figure 13. Number of new cards issued by resident PSPs



Source: ECB Statistical Data Warehouse

Figure 14. Number of POS transactions by resident PSPs



Source: ECB Statistical Data Warehouse

II. OPEN DISCUSSION QUESTIONS

- What are the lessons of the pandemic for digitalisation? How can the RRP investments and loans for the digital transformation of Greece help Greece businesses to leapfrog to the digital frontier? What are the main challenges?
- What are the key priorities in other Member States (e.g., Spain) in meeting the RRP digital challenge? Are there any broader insights to be shared?
- What are the best practices for encouraging business digitalisation in other Member States? How can improving digital skills create new business opportunities for smaller businesses? What other policy measures are needed to support this transition?
- What have been the lessons of the pandemic for the revenue administration service? How will the RRP plans for a fully digitalised revenue services transform taxpayer services and revenue performance?
- Internet usage by individuals is relatively low compared to the EU average. Similarly, Greek businesses often do not have internet presence. Which policies can enhance the technical understanding and digital skills of individuals that might also improve digitalisation perspectives for Greek businesses?
- Despite a big increase in newly issued cards and POS payment during the pandemic, the value of electronic transactions to GDP remains relatively low in EU-terms. Which further technologies and measures could enhance the use of electronic payments?

III. SOURCES

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