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Team

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POLICY BRIEFING
BELARUS

IT Industry Monitoring Belarus

by Aleš Alachnovič

Executive summary

- » IT industry in Belarus accounted for 5.8% of GDP in 2021, compared to 3.0% in 2016, contributing one-third to total GDP growth (between 2011 and 2021 it was even ca. 60% of total GDP growth!)
- » The IT industry share in Belarusian GDP is among the largest in Europe
- » Number of employees in the IT industry in 2021 (88.5k) made up 2.2% of total employees
- » Over 4x higher wages than Belarus' average wage make the IT industry highly attractive for employees
- » ICT (larger sector than IT industry) goods and service exports of USD 3.8b in 2021 (5.5% of GDP) accounted for 7.5% of total BLR exports
- » Regional distribution: the IT industry is strongly concentrated in Minsk
- » Hi-Tech Park (HTP) establishes an attractive special regime to help develop IT industry and attract more foreign investment in IT (over 60% of all ICT employees are employed by HTP residents)
- » For many years the IT industry was booming and was one of the key engines of economic growth in Belarus. But the situation has changed dramatically after February 2022 (in the following 10 months the IT industry lost almost 20% of the total number of employees)

Content

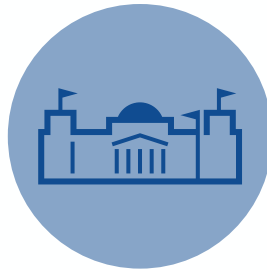
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1. State of digitalisation in Belarus

Digitalisation in Belarus

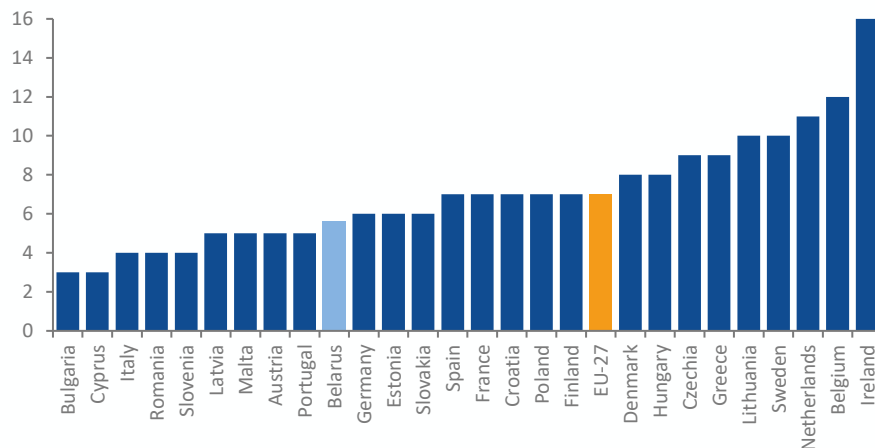


*almost 3/4 of population
uses the Internet daily*



*over 1/4 of population
uses the Internet to interact
with the authorities*

Enterprises' turnover from online sales (% of total turnover) in 2021



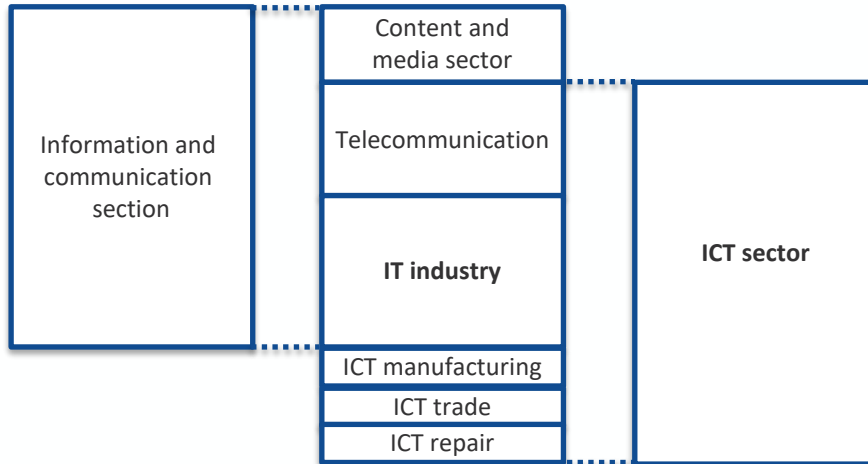
Source: Belstat, Eurostat

In 2021:

- » 35 subscribers and users of wired broadband Internet per 100 citizens
 - » 98 subscribers and users of wireless broadband Internet per 100 citizens
 - » 86.9% of population (6-72 years) used the Internet
 - » 72.8% of population (6-72y) used the Internet daily
 - » 46.3% of population (6-72y) used the Internet for financial transactions
 - » 26.7% of population (6-72y) used the Internet to interact with the government
 - » 5.6% of total enterprises turnover came from web sales which is slightly less than the EU average
- **Belarus could be assessed as a digitally accessible country and its digitalisation is constantly enhanced**

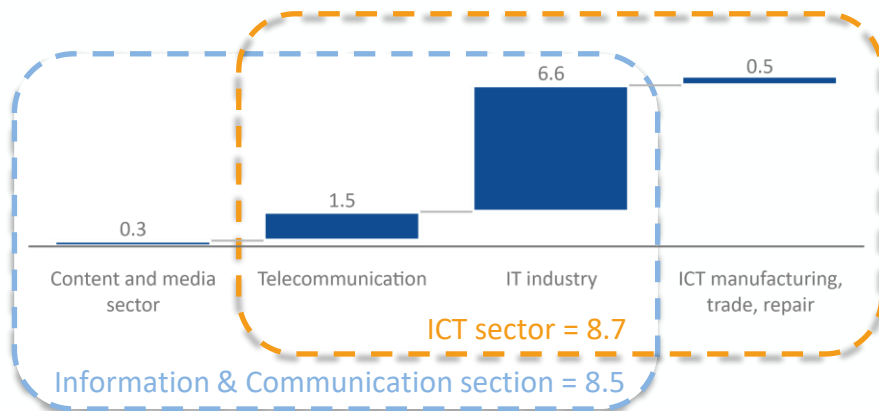
2. IT vs ICT definition (1/2)

IT industry & ICT sector definition



Source: Own illustration based on Belstat and International Standard Industrial Classification (ISIC) Rev. 4

IT industry & ICT sector share of GVA in 2021 (% of total GVA)

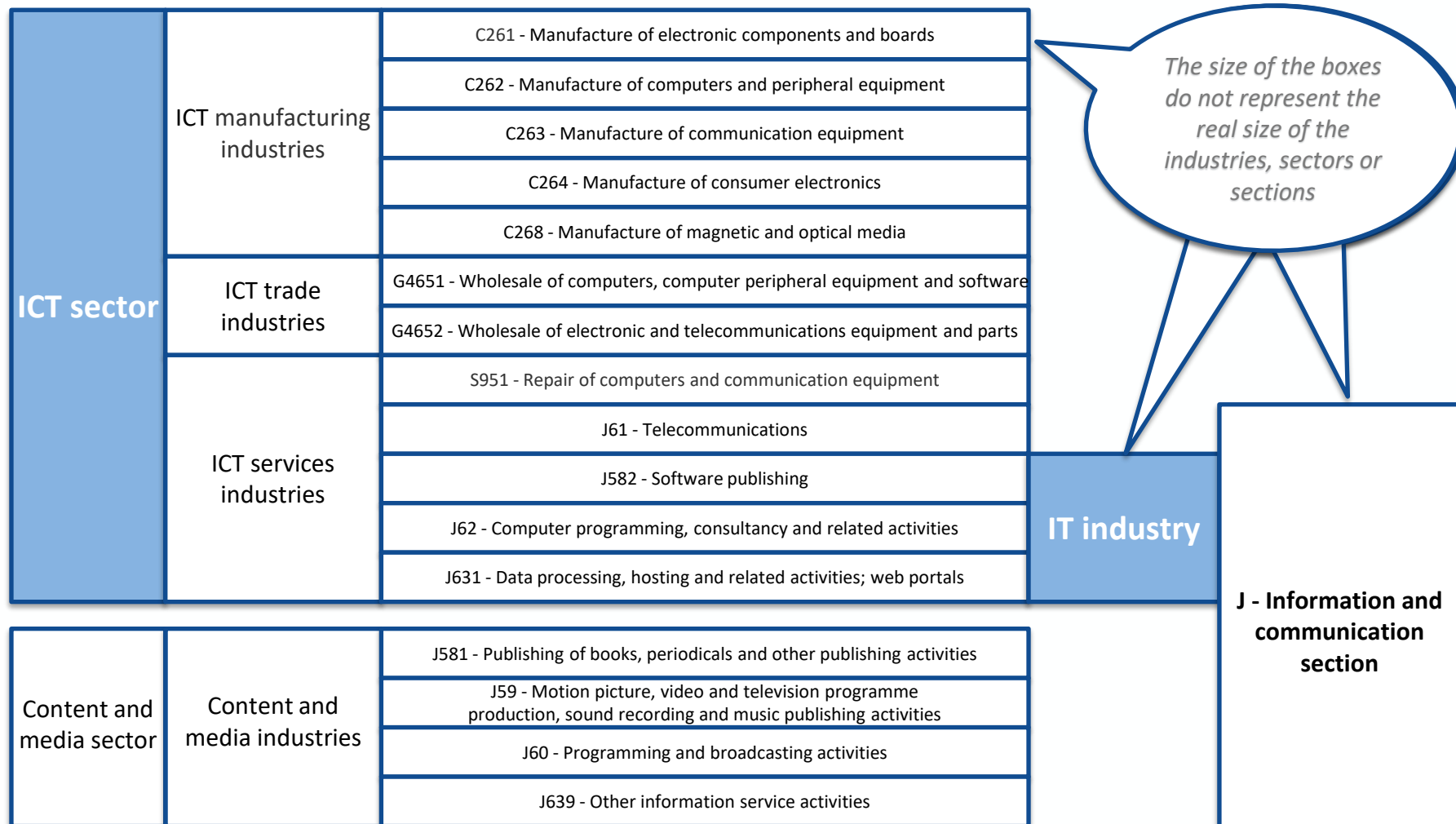


Source: Own illustration based on Belstat and International Standard Industrial Classification (ISIC) Rev. 4

- » For the purpose of this analysis, we will use the following definitions stemming from International Standard Classification
- » “IT industry”:
 - Software publishing
 - Computer programming, consultancy and related act.
 - Data processing, hosting and related act.; web portals
- » Information and communication technologies sector (“ICT sector”) is a wider concept that apart from the IT industry includes also:
 - Telecommunication services
 - ICT manufacturing
 - ICT trade
 - Repair of computers and communication equipment
- » “Information and Communication section” (or “IC section”) is often misled with the ICT sector:
 - In contrast to the ICT sector, it excludes ICT manufacturing, trade and repair but includes “Content and media sector” (see next page)
- **IT industry stands for the vast majority of both ICT sector and Information and Communication section. Depending on the data availability different concepts (industry/sector/section) might be used to analyse the IT industry**

2. IT vs ICT definition (2/2)

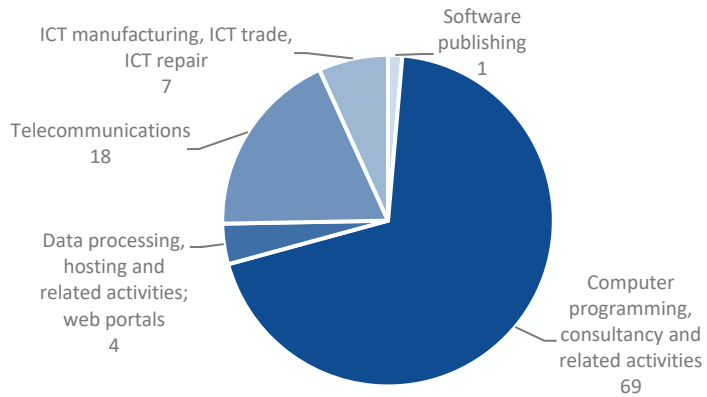
IT industry & ICT sector definition and components (with ISIC/NACE codes)



Source: Own illustration based on Belstat and International Standard Industrial Classification (ISIC) Rev. 4

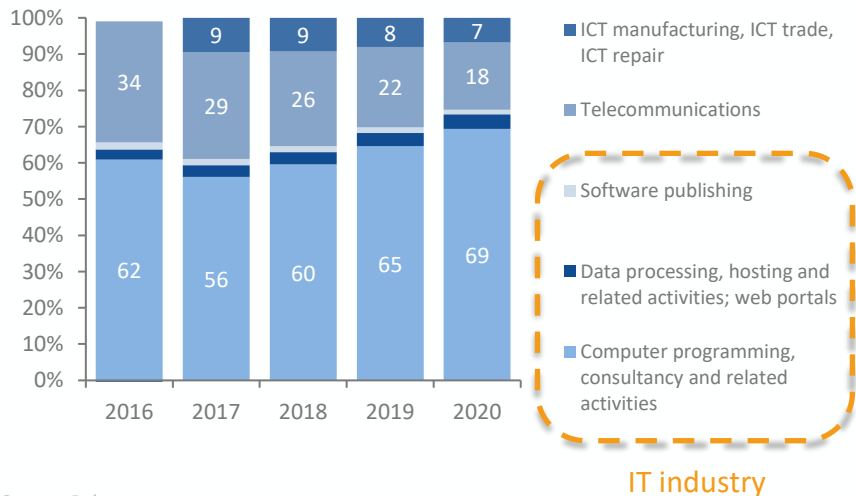
3. Distribution of activities within the ICT sector

GVA structure of ICT subsectors, 2020



Source: Belstat. Due to the lack of data the split of J58 Publishing activities into J581 Publishing of books, periodicals and other publishing activities and J582 Software publishing was estimated at 50%/50%

GVA structure of ICT subsectors, 2016-2020



Source: Belstat

- » Services dominate the Belarusian ICT sector: over 95% of ICT sector GVA is in services

Importance of IT industry

- » IT industry makes up 75% of the ICT industry
 - Computer programming, consultancy and related activities = 69% of ICT sector GVA
 - Data processing, hosting and related act.; web portals = 4% of ICT sector GVA
 - Software publishing = 1-2% of ICT sector GVA
- » While the share of computer programming, consultancy and related activities increases, the other two components remain relatively stable share of ICT industry

Telecommunications

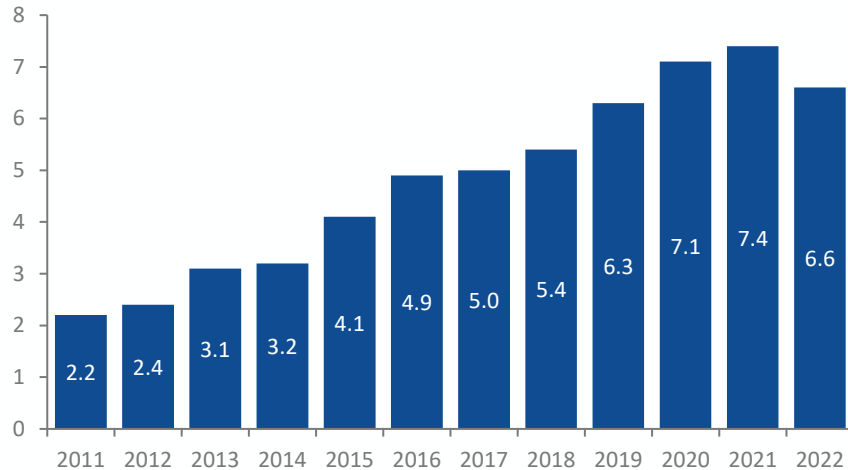
- » The share of telecommunications significantly decreases over time

ICT manufacturing, ICT trade and ICT repair

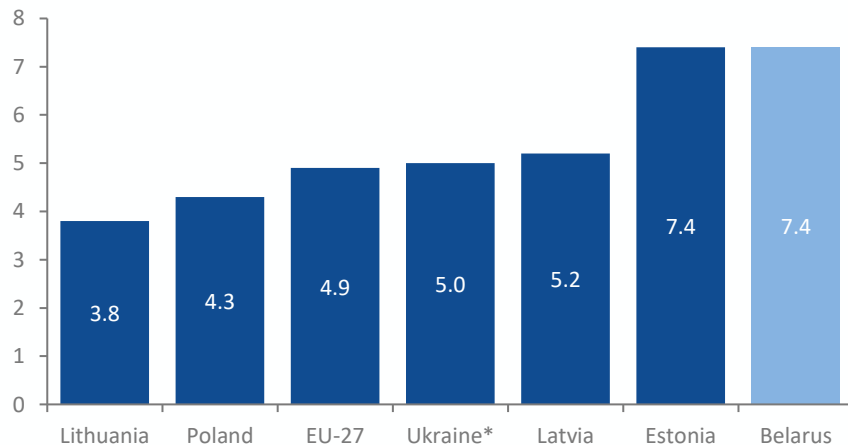
- » The share of ICT manufacturing, trade and repair contributes less and less to the ICT sector
- Computer programming, consultancy and related activities is the fastest growing component of the ICT sector

4. Size of the IT industry

Gross Value Added in IC (% of total GDP)



Gross Value Added in IC (% of total GDP) in 2021



Source: Belstat, Ukrstat, Eurostat. *Data for 2020 is the latest available

Contribution to GVA

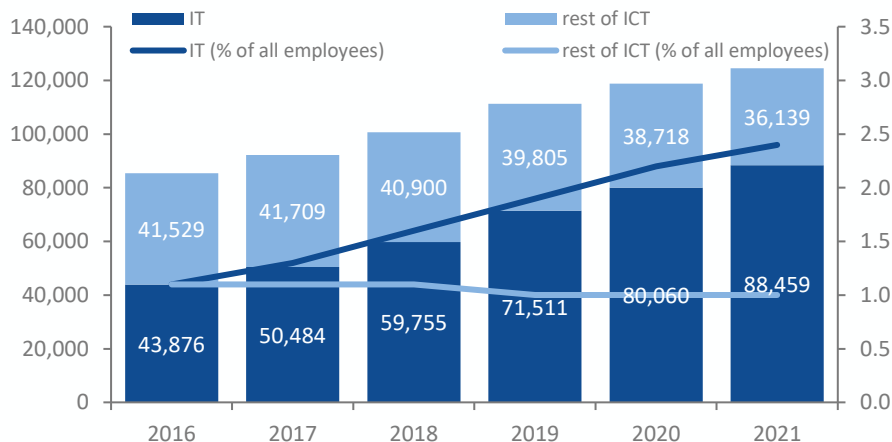
- » IT industry is among the largest and fastest growing industries in Belarus. Its share of total GDP had been increasing significantly until recently
 - IT industry: 3.0% in 2016 vs 5.8% in 2021
 - ICT sector: 2.8% in 2011 vs 7.6% in 2021
 - IC section: 2.2% in 2011 vs 7.4% in 2021
- » In 2016-2021 real GVA in IT grew at a double-digit annual pace (over 14% on average), i.e. 8x the average GDP growth
 - 2017: IT: +10.3% vs GDP: +2.5%
 - 2018: IT: +18.2% vs GDP: +3.1%
 - 2019: IT: +17.6% vs GDP: +1.4%
 - 2020: IT: +14.6% vs GDP: -0.7%
 - 2021: IT: +10.7% vs GDP: +2.3%

Regional comparison

- » At 7.4% of GDP in 2021, IC section in Belarus was already bigger than in all neighbouring countries apart from Estonia. In the EU only 4 countries had higher share: Ireland (17.0%), Malta (9.3%), Cyprus (7.6%) and Sweden (7.5%)
- Until the war in 2022, the IT industry was booming and was one of the key engines of economic growth in Belarus

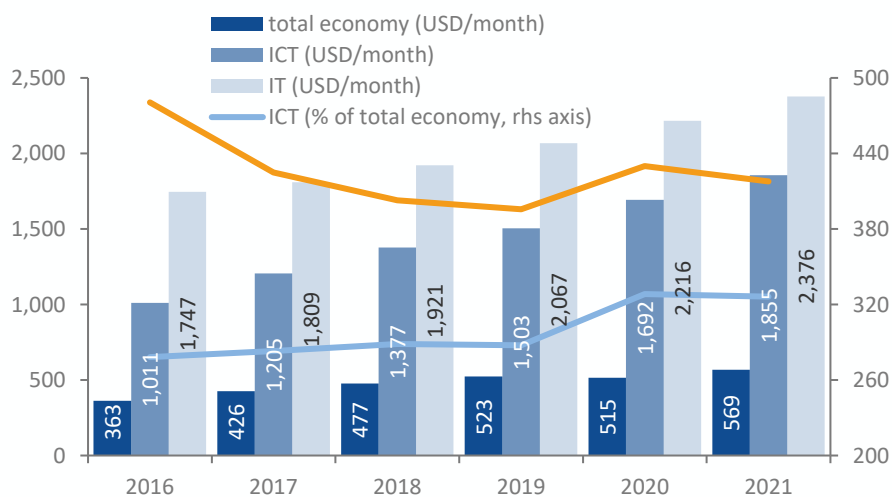
5. Wages and number of IT specialists

Average annual number of employees in IT & ICT



Source: Belstat

Wages in IT*, ICT and the economy



Source: Belstat; National Bank of Belarus. *Annual wages for IT industry are approximated by average monthly wages in J62-63 subsectors (see p.6)

Employment

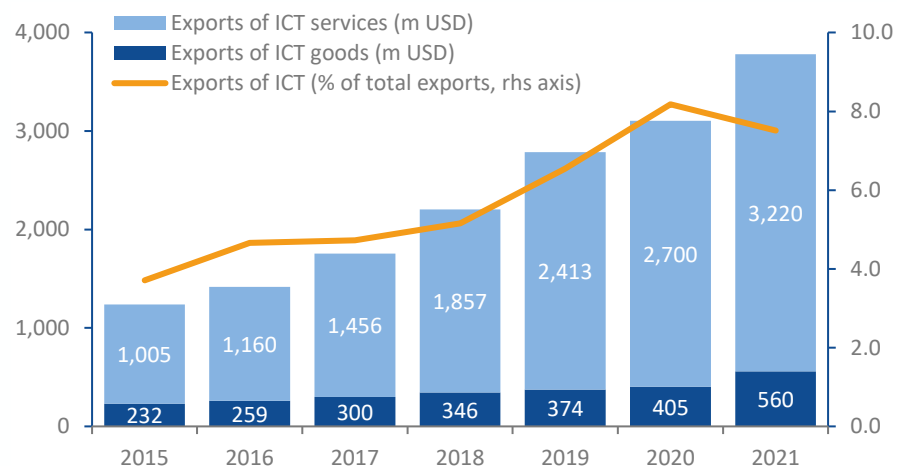
- » Difference between the number of employees in IT vs employment in IT (employees + self-employed)
 - 2021: 88k of employees vs 108k of total employment
- » Share of IT industry in total number of employees was constantly increasing
 - 2016: 1.1% in IT (2.2% in ICT)
 - 2021: 2.4% in IT (3.4% in ICT)
- » IT makes up the majority of ICT workforce
 - 51% in 2016
 - 71% in 2021
- » In 2017-2021, number of IT employees grew by 15% yoy (vs -1% yoy in economy)

Wages

- » Over 3-4x above national average in 2021
 - National average: USD 569/month
 - ICT sector: USD 1,855/month
 - IT industry: USD 2,376/month
- Highly attractive industry for employment

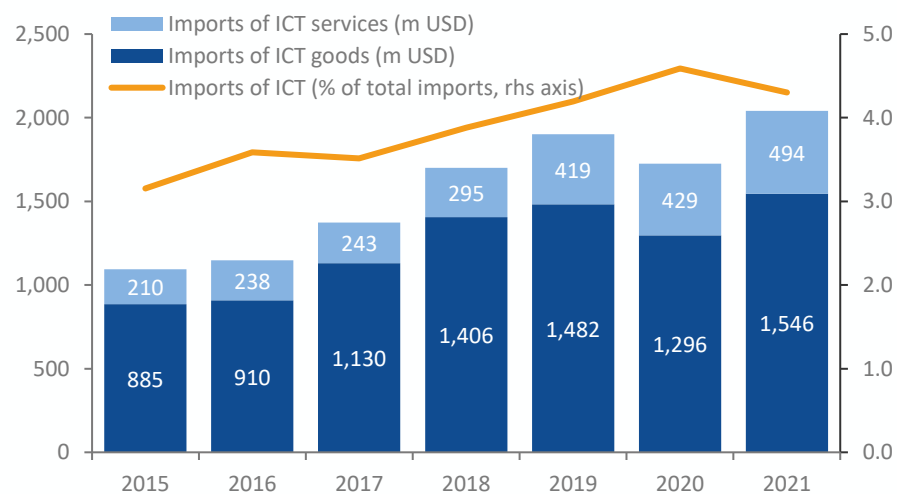
6. Role in international trade

ICT exports



Source: Belstat

ICT imports



Source: Belstat

- » Belarus is a net exporter of ICT services and a net importer of ICT goods

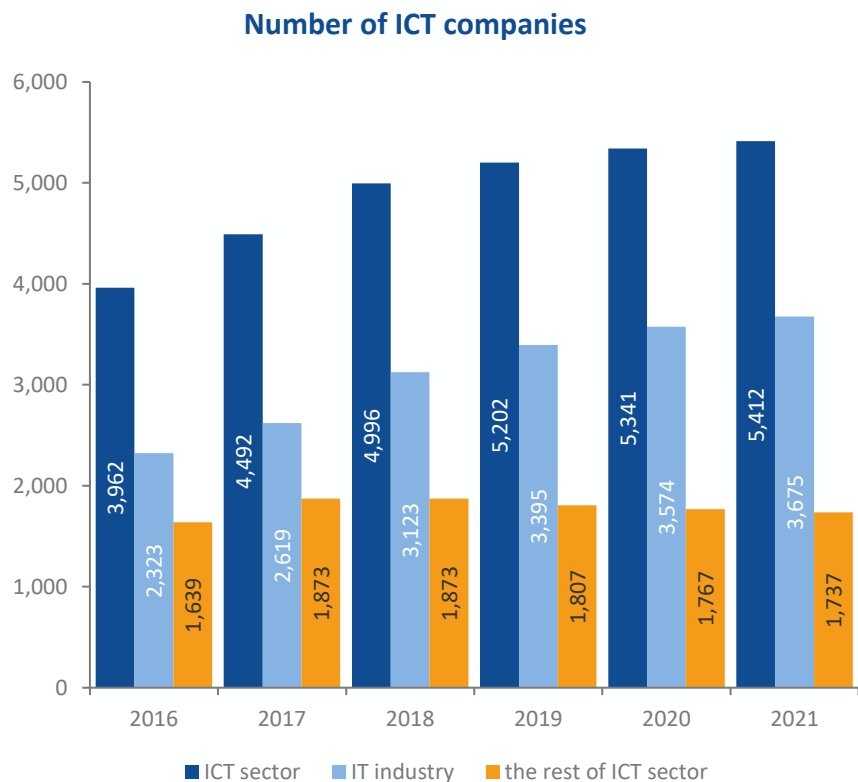
Exports of ICT

- » Exports dominated by services (i.a. software)
- » 2021: 7.5% of total BLR exports, 5.5% of GDP
- » Strong growth of ICT services exports: from USD 1.0 bn 2015 to USD 3.2 bn in 2021
- » Exports of ICT goods grew less substantially: from USD 0.23 bn 2015 to USD 0.56 bn 2021
- » Share of ICT exports in total exports was increasing

Imports of ICT

- » Imports dominated by goods (hardware): USD 1.5 bn goods imports and USD 0.5 bn services imports
- » 2021: 4.3% of total BLR imports, 3.0% of GDP
- » Slightly increasing share of ICT goods in total imports indicates investment in new ICT technologies
- Service exports were booming and were very important for the currency inflow
- Net ICT trade balance positive, despite net imports of ICT equipment

7. Number of companies in the ICT sector



Source: Belstat

- » The number of companies in ICT sector increases over time mainly due to the new incomers in IT industry
 - 2016: 2,323 companies in IT
 - 2021: 3,675 companies in IT
- » The number of companies in telecommunications, ICT manufacturing, ICT trade and ICT repair fluctuates around 1,650-1,850 companies
- » These numbers does not include sole proprietors (individual entrepreneurs)
- The IT industry is the most dynamic part of the ICT sector. The IT industry grew both due to the increasing size of existing companies as well as increasing number of new companies

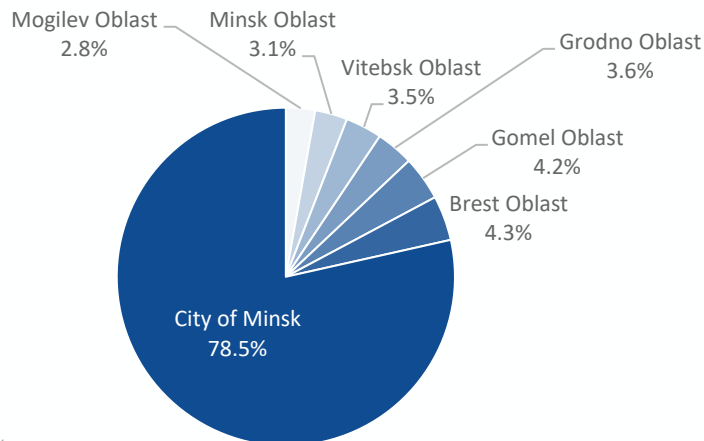
8. Top companies in the IT industry

No.	Name	Employees in Belarus	Technical employees in Belarus	Employees in the world	Year of foundation	Country of origin	Location of HQ
1	EPAM	10000+	9638* (as of Jan 1, 2022)	47850	1993	USA	Newtown, USA
2	iTechArt Group	3100	2900	3500	2002	Belarus	New York, USA
3	IBA Group	2380	1900	2650	1993	Belarus	Prague, Czechia
4	I transition	2500	2700	3000	1998	Belarus	Austin, USA
5	Wargaming	2400 (as of 2021)	n/a	5500	1998	Belarus	Nicosia, Cyprus
6	Godel Technologies Europe	1256	1167	1543	2002	Belarus	Manchester, UK
7	ISsoft	1200 (as of 2021)	1100 (as of 2021)	1500	2004	Belarus & USA	Minsk, Belarus
8	LeverX Group	1100	1000	1300	2003	Belarus	Silicon Valley, USA
9	SoftClub	1000 (as of 2021)	650 (as of 2021)	1000 (as of 2021)	1993	Belarus	Minsk, Belarus
10	Andersen	986	615	2000	2007	Poland	Warsaw, Poland

Source: Dev.by, official websites and other public resources

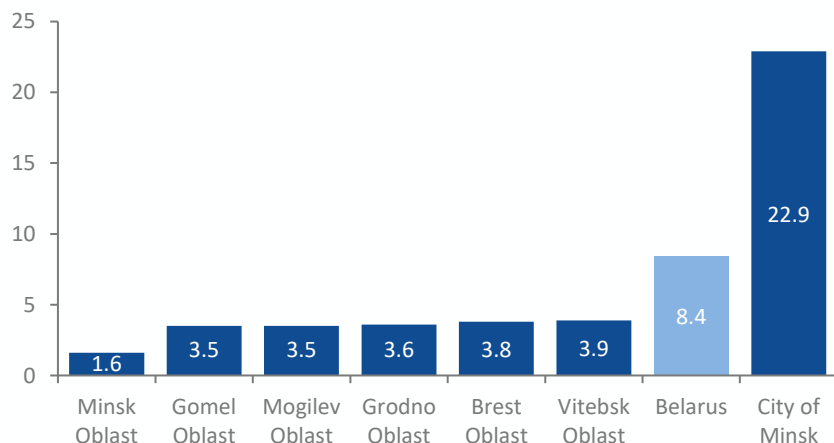
9. Regional distribution

Regional distribution of ICT GVA, 2020



Source: Belstat

Share of ICT GVA as % of Belarus/region GVA, 2020

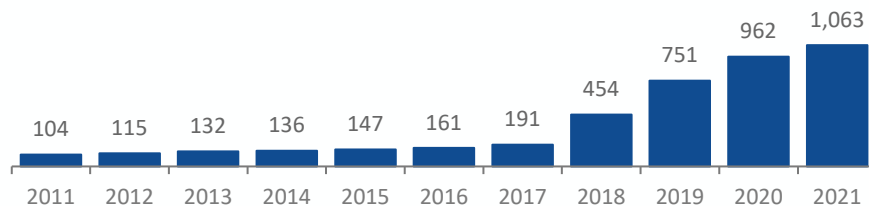


Source: Belstat

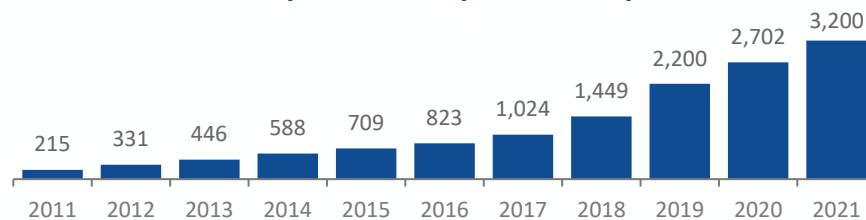
- » Almost 80% of all ICT GVA is created in the city of Minsk, the rest is distributed relatively evenly among six regions (“Oblast”)
- » In 2020, ICT GVA stood for 8.4% in Belarus’ GVA, but for the city of Minsk this sector was the most important sector, accounting for almost 23% of the city’s GVA
- » In all regions (Oblast), the share of ICT sector in GVA of the region was significantly below the country’s average, with the smallest contribution in Minsk Oblast
- » This happens because Minsk is the host of Hi-Tech Park (HTP), the special economic zone for the ICT sector, and the location of the leading Belarusian universities
- » According to Belstat, in 2021 over 75% of persons employed in IT industry were working from Minsk (though not all of them work physically from the HTP headquarters)
- **IT/ICT is concentrated primarily in Minsk**

10. Special regime for IT companies: HTP (1/2)

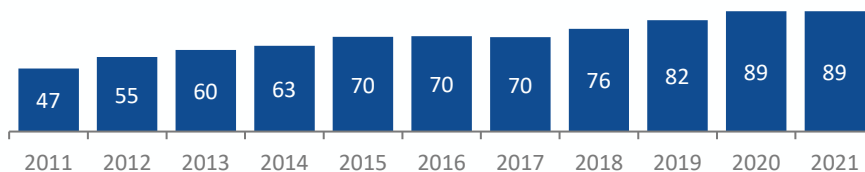
Number of HTP resident organisations



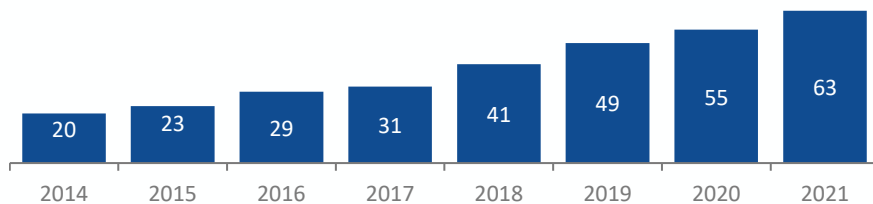
Exports of HTP (million USD)



Share of exports of ICT services by HTP resident organisations in total exports of ICT services



Average annual number of employees in HTP (as % of employees in ICT sector)



Source: Belstat

- » The core of the Belarusian ICT is the Hi-Tech Park (HTP) est. in 2005, redesigned in 2017
- » HTP is a special regulatory/tax regime for IT companies in Belarus
- » HTP provided its residents with significant tax benefits, instruments of the so-called “English law”, free movement of capital, transparent regulation of the blockchain and cryptocurrencies, and other preferences (see next page)
- » HTP residents are export-oriented and service-oriented (i.e. mainly outsourcing/outstaffing companies with relatively few product companies)
- » Over 35% of HTP residents are companies with foreign capital
- » Over 90% of HTP exports goes to the West (mainly USA and EU)
- Attractive special regime to help develop domestic IT industry and attract more foreign investment in IT

10. Special regime for IT companies: HTP (2/2)

Tax benefits

- » IT companies are exempt from VAT, corporate income tax, offshore fees, customs duties on IT equipment imports, corporate tax of foreign companies, incl. sales of shares in HTP resident, VAT and income tax on mining, purchase/sale and exchange of cryptocurrencies, other operations with tokens, property tax, land tax
- » Corporate income tax for IT companies amounts to 13%
- » Social security tax is based on the average salary in Belarus (hence, the higher the IT salary is, the smaller is the effective rate of social security contribution)
- » Corporate tax for foreign companies amounts to 5%

Legal framework for blockchain and cryptocurrency

- » Comprehensive legal regulation allows HTP residents to provide cryptocurrency exchange services and to attract funding through ICOs and TSOs

Extraterritorial approach

- » HTP legal regime operates throughout the territory of Belarus. The company can be registered and located anywhere in the country

37 types of activities

- » Along with the traditional software development, companies can develop various areas of high-tech business: from robotics and the internet of things to cryptocurrency mining

Institutions of “English Law” for investors

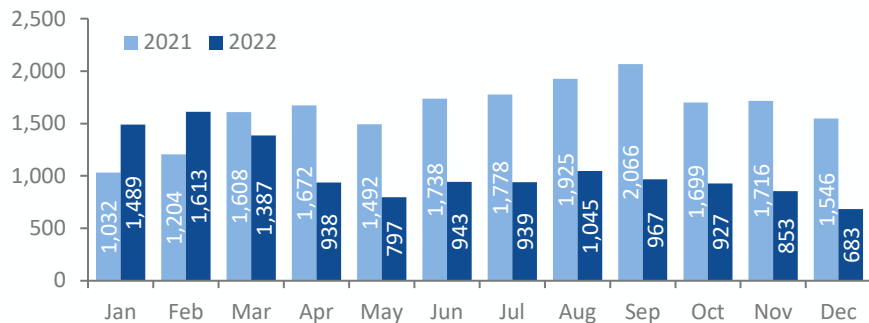
- » HTP residents can use international standard institutions like option agreements, convertible loans, shareholder agreements, non-poaching agreements, non-compete agreements

Convenient relocation and visa-free entry

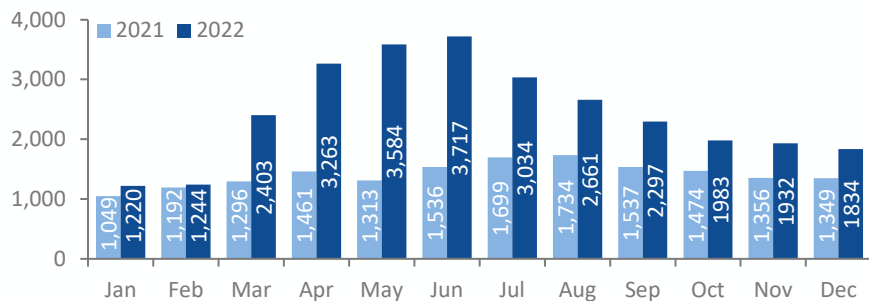
- » Employment of foreigners possible without any special permits
- » Simplified temporary residence permit procedure for foreign employees
- » Visa-free entry for foreign employees and founders (temporary stay allowed up to max. 180 days)

11. Current developments (1/3)

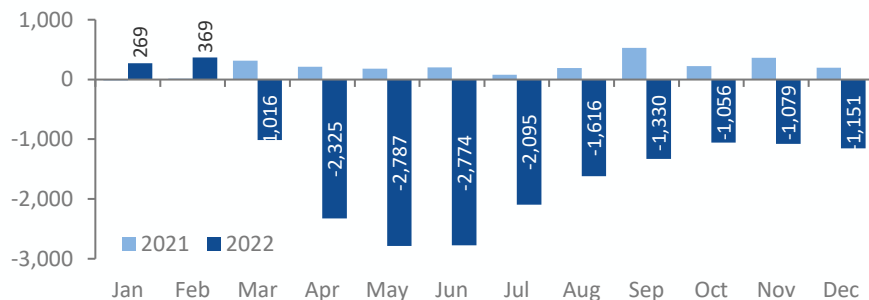
No. of employees hired in the IT industry*,**



No. of employees made redundant in the IT industry*,**



Net inflow/outflow of employees in IT (persons)*,**

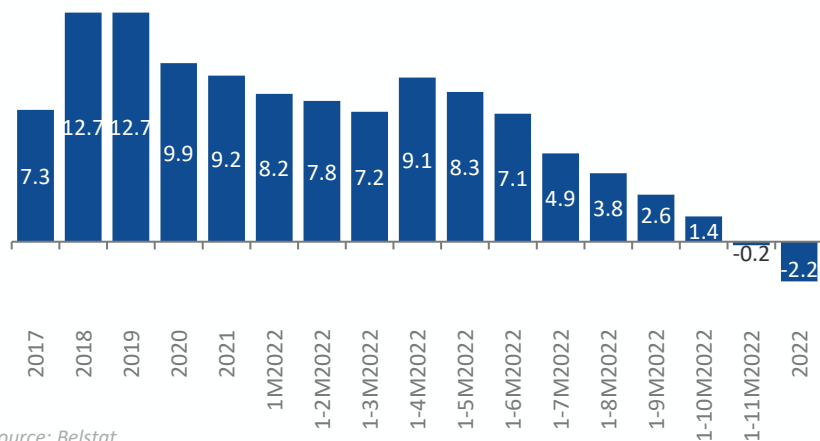


- » After Feb-22, the IT industry stopped growing
- » Mar-Dec 2022: small, medium and large companies in the IT industry* (i.e. without micro business employing up to 15 employees and individual entrepreneurs) lost 17.2 thsd. employees, i.e. almost 20% of the total number of employees in the IT industry
 - Dec-22 was the 10th month in a row when the number of employees in the IT industry decreased (by over 1 thsd. specialists). In recent months, the outflow of specialists in the IT industry has slowed down
 - In 2022 IT companies hired only 13.0 thsd. new employees (-34% yoy) while fired 29.6 thsd. employees (+74% yoy)
 - The current outflow of IT specialists (after 24 Feb 2022) is greater than the outflow of IT specialists after Aug-20. Hence, this is the most serious blow to the IT industry in Belarus in its entire history

» **The alarming statistics on employee's outflow in 2022 suggests that the IT industry will no longer be a driving force of the Belarusian economy**

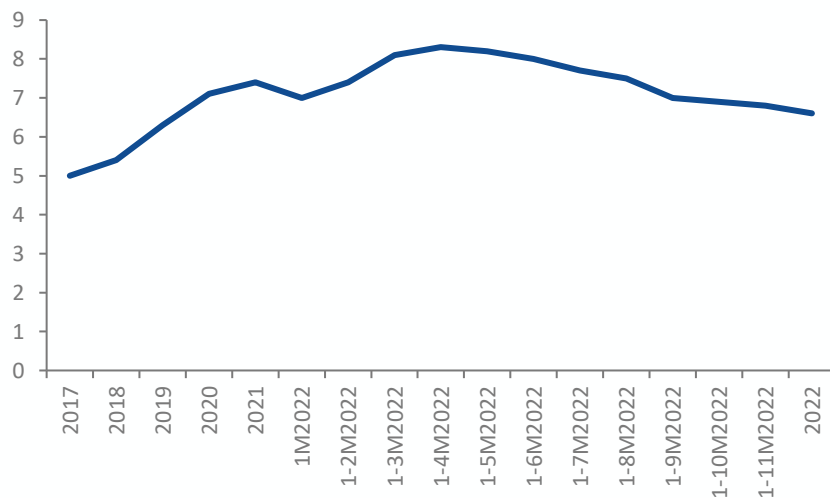
11. Current developments (2/3)

Real GVA in IC (% yoy)



Source: Belstat

GVA in IC (% of total GDP)

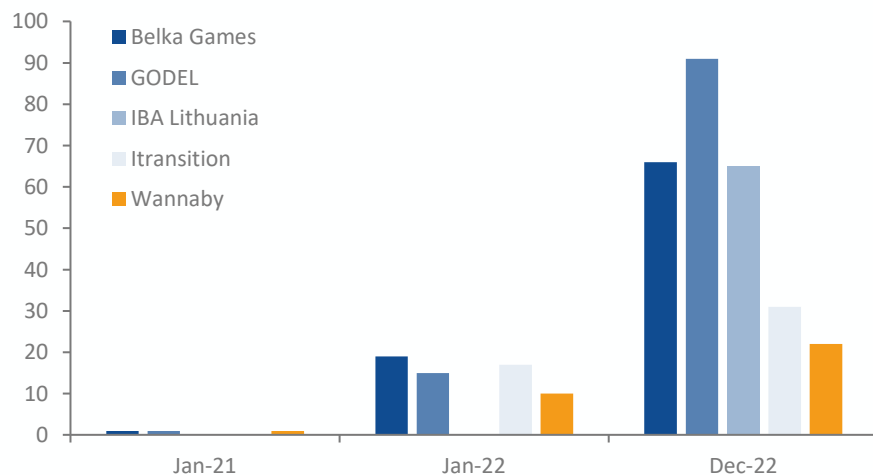
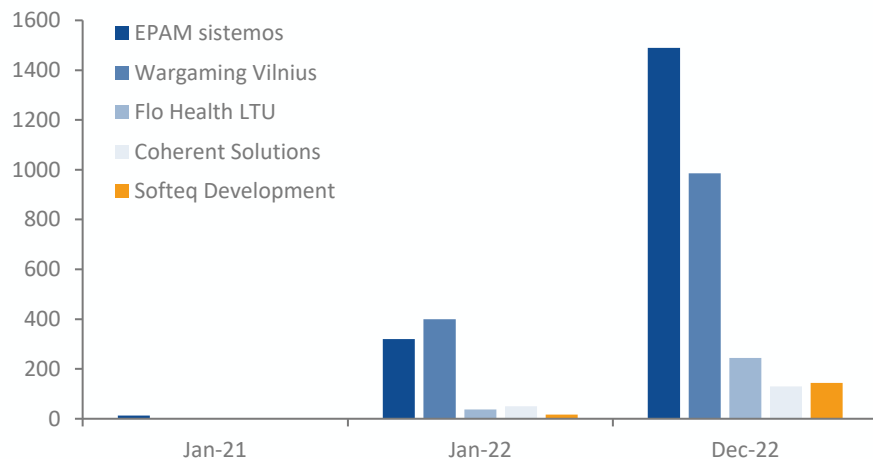


Source: Belstat

- » In 2012-2021, IT industry was growing so fast that it contributed to 60% of the total GDP growth (between 2016 and 2021 it was 1/3). On average, GDP grew by less than 0.7 p.p., out of which IT made up ca. 0.4 p.p. The past decade was the period when BLR economy stagnated, and hence, a dynamic IT industry growth contributed to such a significant share of total GDP growth
- » Dec-22 was the 6th month in a row when IC section contracted (-11% yoy in 4Q2022, according to BEROC), contributing -1.0 p.p. to total GDP growth
- » For the first time in decades, in 2022 IC section shrank – by 2.2% (compared to +9.2% in 2021)
- » The relocation of IT specialists from Belarus accelerated after the start of the war. Belarusian IT specialists move both to the EU countries (mainly to POL and LTU) and to the East (GEO and UZB). Relocation affects mainly middle- and senior-specialists
- » In 2022, for the first time since 2011, the IC share of total GDP shrinks

11. Current developments (3/3)

Number of employees in the largest IT companies with Belarusian roots in Lithuania



Source: rekvizitai.vz.lt

Relocation

- » Illustrative example of how dramatically situation changed: the total number of employees in Top-10 IT companies with Belarusian roots in Lithuania almost quadrupled in Dec-22 compared to Jan-22
- » Poland: from 10 Aug 2020 till 30 Jun 2022 Poland gave 43 thsd. visas within Poland Business Harbour (programme dedicated to IT relocation), although less than ¼ of them was actually used by IT specialists and their family members
- » Altogether over 20 thsd. IT specialists could have relocated abroad from Aug-20 till Jun-22 (Source: dev.by)
- » Some of the largest IT companies closed their businesses in BLR (Wargaming, PandaDoc, Flo, Wannaby, OneSoil, WorkFusion, EIS Group, Vochi, Playrix, and others)
- » What could be done to change the trend?
 - Stop the participation of Belarus in Russian war against Ukraine
 - Solve the internal political crisis
- Under current circumstances, the relocation of IT specialists and companies will go on while the IT sector will stagnate or even shrink in the medium-term

About the German Economic Team

Financed by the Federal Ministry for Economic Affairs and Climate Action, the German Economic Team (GET) advises the governments of Ukraine, Belarus*, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

**Advisory activities in Belarus are currently suspended.*

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