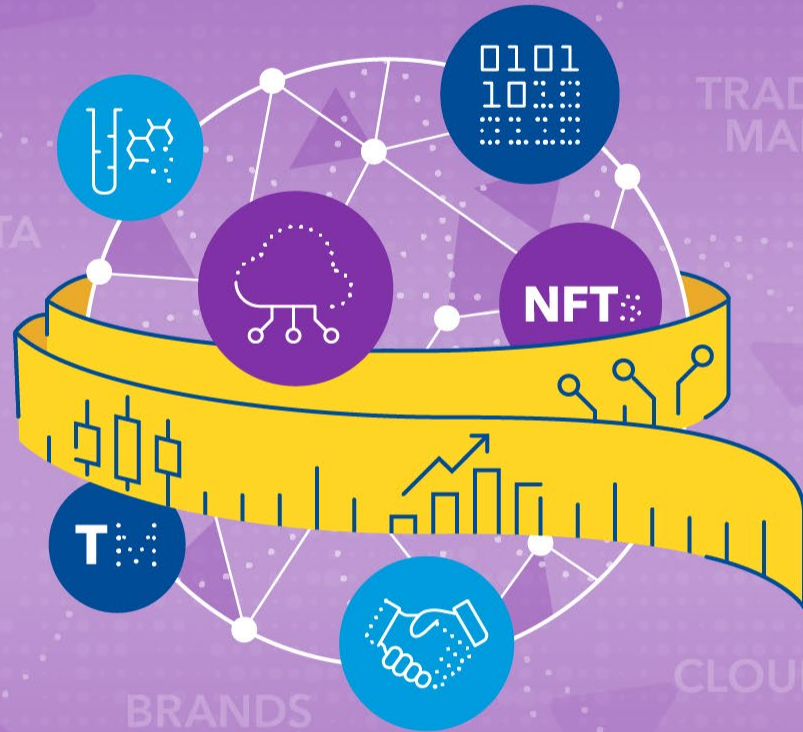


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MEASURING

THE TANGIBLE BENEFITS
OF INTANGIBLE CAPITAL



The impact of R&D on the labor productivity of enterprises working in the Palestinian economy, 2018

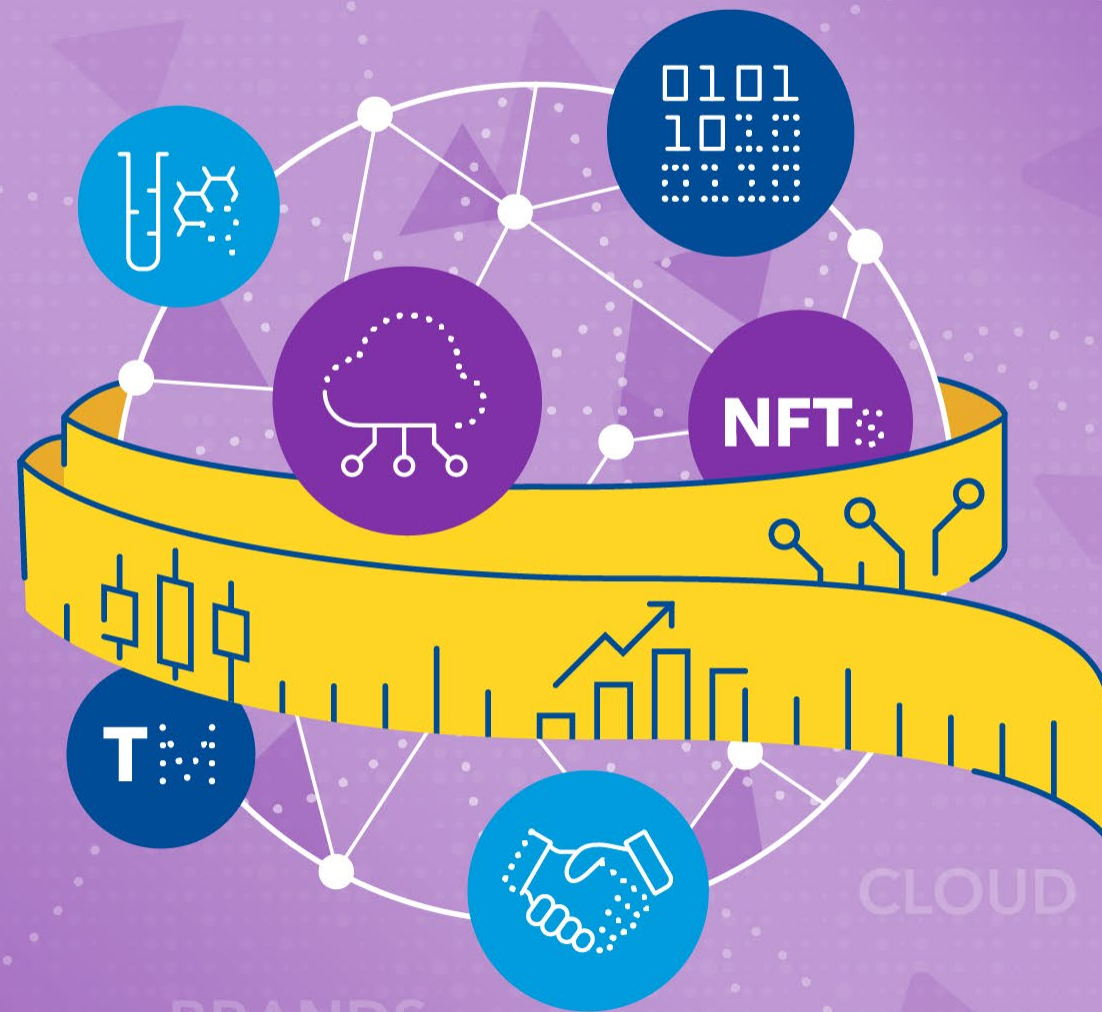
NOVEMBER 16, 2022

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10TH IMF Statistical Forum

MEASURING THE TANGIBLE BENEFITS OF INTANGIBLE CAPITAL



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Introduction:

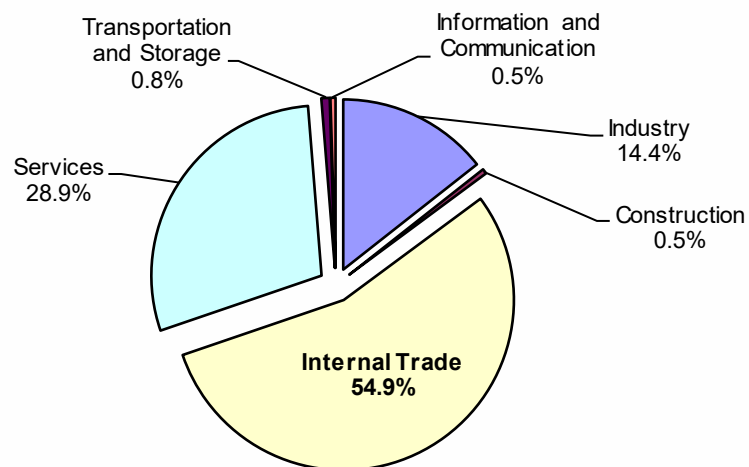
Main Indicators for the Palestinian economy:

- Population in 2021: 5,3 million (60% West Bank; 40% Gaza Strip)
- Illiteracy rate for Palestinians aged 15 years and above in 2021: 2,3%
- Unemployment rate for Palestinians in 2021: 26% (16% West Bank; 47% Gaza Strip)
- Poverty rate for Palestinians in 2017: 29% (14% West Bank; 53% Gaza strip)
- GDP at current prices for 2021: USD 18 billion (83% West Bank; 17% Gaza Strip)
- GDP per capita: USD 3,600 (USD 4,400 West Bank; USD 1,200 Gaza strip)
- Shares (%) for main activities of GDP in 2021: 70% Services activities, 12% Industry, 7% Agriculture, Construction 5%
- BOP - Current account (Deficit) in 2021: USD 1,49 Billion

Introduction:

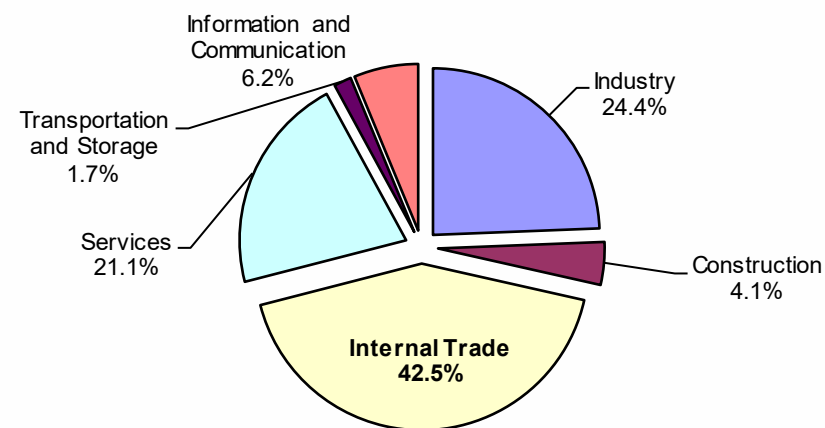
Main Private Sector Indicators for the Palestinian economy in 2018:

- Number of enterprises: 139,800 (67% West Bank; 33% Gaza trip)
- Number of employed persons: 482,000
- Percentage distribution of **enterprises** by economic activity



- Value added of enterprises: USD 8,6 Billion (53%) of GDP (82% West Bank; 18% Gaza Strip)

- Percentage distribution of **value added** by economic activity



Introduction:

Literature:

- Palestinians have invested in human capital through education and career professionalism. Moreover, the challenge to the imposed hard living conditions have created a resilient, determined and innovative Palestinian community. (Morrar, 2018)
- Consequently, well-educated and passionate young people are turning to entrepreneurship as a means to create their own job opportunities, that affects and affected by R&D. (Morrar, 2018)
- R&D activities are affected highly by the existing political and economic instability. (Morrar, 2018)
- Previous literature found a link between R&D and the economic development at micro (firm) and macro level. (Morrar, 2018)
- Firms with persistent R&D activities have more productivity compared with firms with occasional R&D. (Johansson and Löf, 2008)
- This presentation explores the relationship between R&D at the enterprises as (one of intangible asset types) and the productivity of enterprises as (one of output growth determinants) in the Palestinian private sector for the year 2018

Problem Statement:

Research & Development / productivity

Explores the relationship between R&D at the enterprises as (one of intangible assets types) and the productivity of enterprises as (one of output growth determinants) in the Palestinian private sector

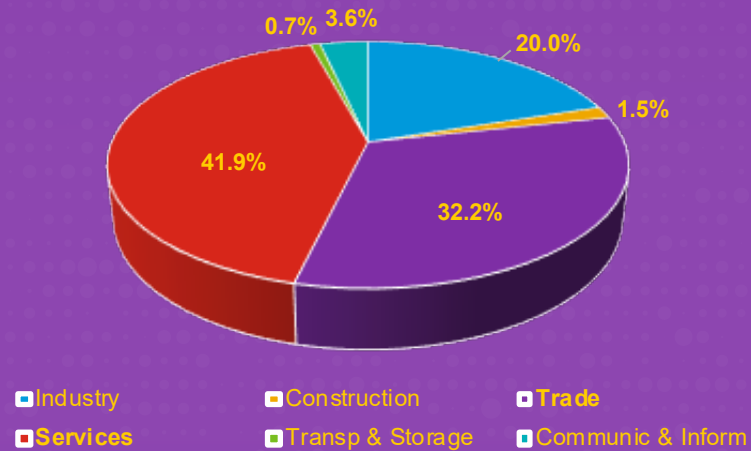
Methodology

- Using the data of economic surveys 2018, which provided the most updated data based on detailed questionnaires designed for National Accounts purposes
- The survey covers all of the West Bank and Gaza, and all activities except agriculture sector
- The sample size of the survey was 9,500 enterprises out of 139,778 enterprises; It used a One-Stage Stratified Systematic Random Sample
- Enterprises were divided into two types:
 - 1- covered overall largest enterprises (2000) taken comprehensively,
 - 2- covered enterprises (7500) selected in a systematic random way

This study presented a *descriptive analysis of the productivity and selected indicators of enterprises which had included R&D units compared to those excluded R&D units, using comparison analysis method.*

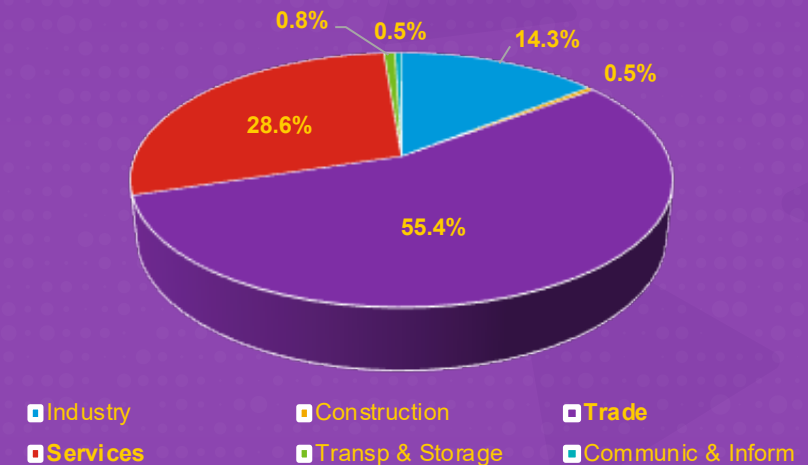
Main Findings

Percentage distribution of enterprises which include R&D units, by economic activity



- Number of (enterprises) **included** R&D units in 2018, was 1,307 enterprises (52% West Bank; 48% Gaza Strip)
- **Services** activities enterprises were participated by 42% of the total enterprises in 2018, then; Trade activities by 32%

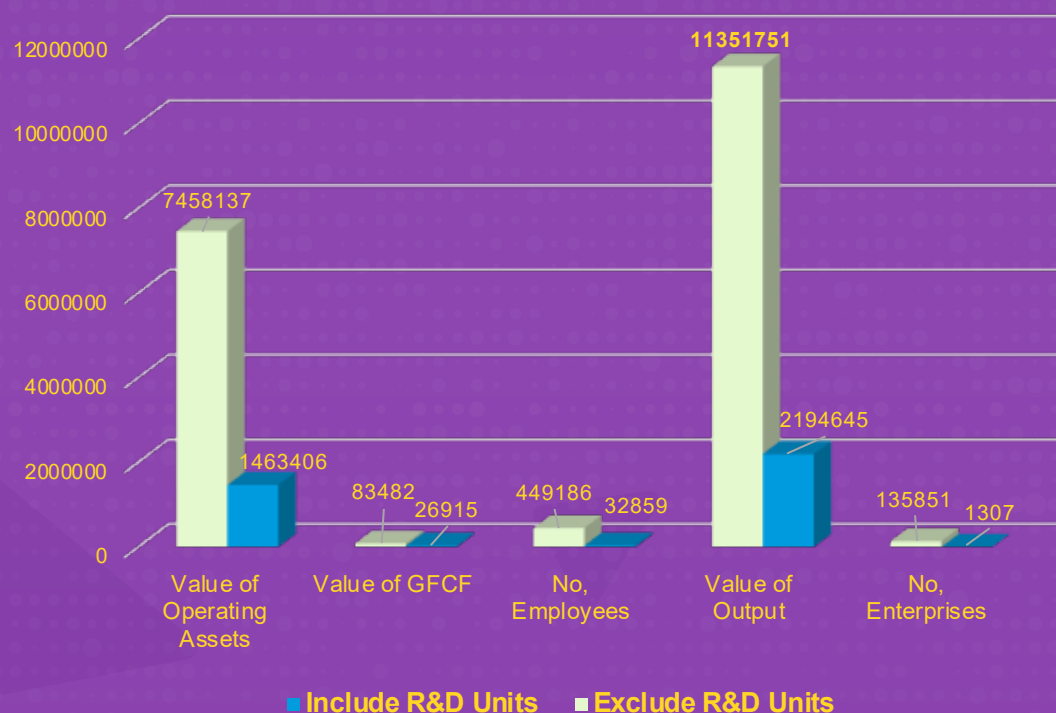
Percentage distribution of enterprises which exclude R&D units, by economic activity



- Number of (enterprises) **excluded** R&D units in 2018, was 135,851 enterprises (67% West Bank; 33% Gaza Strip)
- **Trade** activities enterprises were participated by 55% of the total enterprises in 2018, then; Services activities by 29%

Main Findings

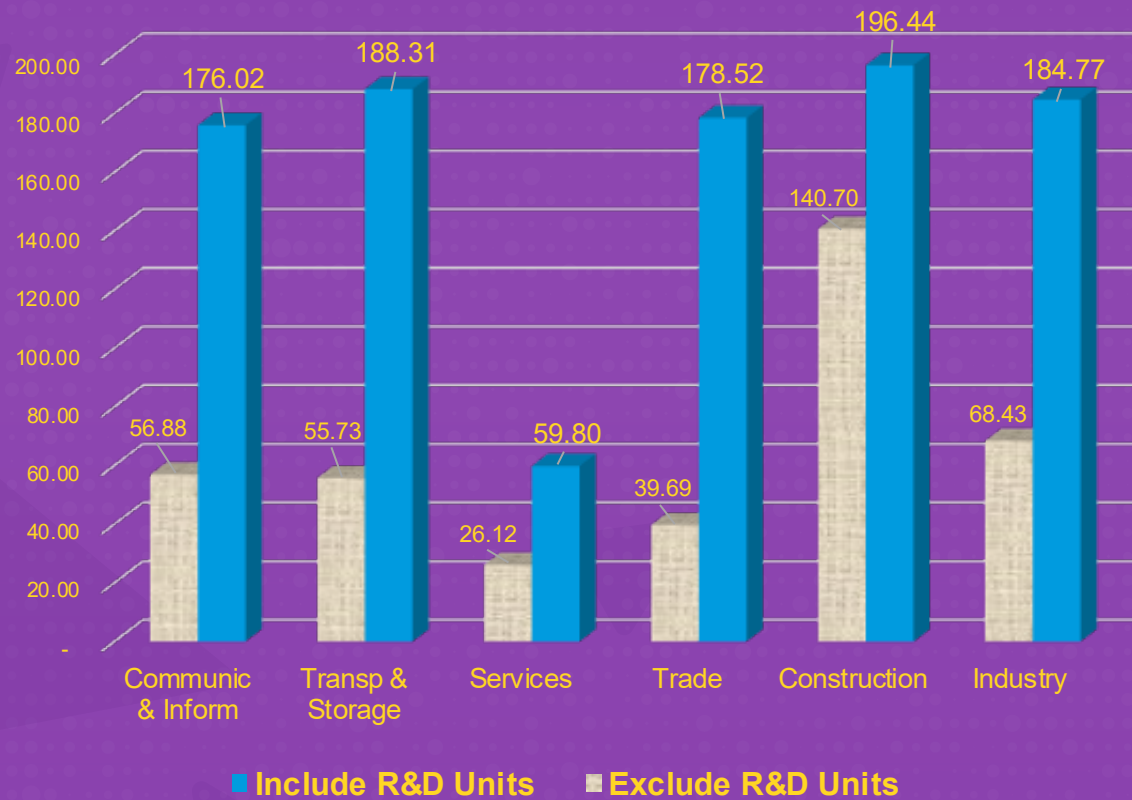
Selected Indicators for enterprises by type, in year 2018, (Value USD 1000)



- Number of (**employees**) for enterprises included R&D units in 2018, was 32,851 employee (62% West Bank; 38% Gaza Strip), while it was 449,186 employee (69% West Bank; 31% Gaza Strip) for those excluded R&D units.
- Value of (**Operating Assets**) for enterprises included R&D units in 2018 was USD 1,46 Billions / Average value per enterprise was USD **1,2 millions**, while it was USD 7,46 Billions / Average value of per enterprise was USD **55 thousands** for those excluded R&D units.
- Value of (**output**) for enterprises included R&D units in 2018 was USD 2,2 Billions / Average value per enterprise was USD **3,8 millions**, while it was USD 11,4 Billions / Average value per enterprise was USD **1,9 millions** for those excluded R&D units

Main Findings

Value of *labor productivity* for enterprises by type, in year 2018, (Value USD 1000)



- Value of (**Labor Productivity**) for enterprises included R&D units in 2018 was **USD 984 Thousands**, while it was **USD 388 Thousands** for those excluded R&D units
- The highest gap in labor productivity was in Trade activities, then; transport and storage

Conclusion

- Ratio of (**enterprises**) included R&D units to those excluded R&D units in 2018, less than 1%
- Ratio of (**output Value**) for enterprises included R&D units to those excluded R&D units in 2018 was 19%
- Ratio of (**employees**) for enterprises included R&D units to those excluded R&D units in 2018 was 7%
- Ratio of (**Operating Assets value**) for enterprises included R&D units to those excluded R&D units in 2018 was 20%,
- Slight deference among distribution of enterprises, by economic activity and type of R&D units inclusion
- Ratio of (**Labor Productivity value**) for enterprises included R&D units to those excluded R&D units in 2018 was 256%, mainly in (internal trade, transportation and storage) activates.

A strong positive relationship between R&D at the enterprises as (one of intangible assets types) and the labor productivity of enterprises as (one of output growth determinants)

Thank you

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