DESIGN AND PENSION REFORMS

ECONOMICS AND COVID-19

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https://www.pinboxsolutions.com

PINBOX™ SOLUTIONS

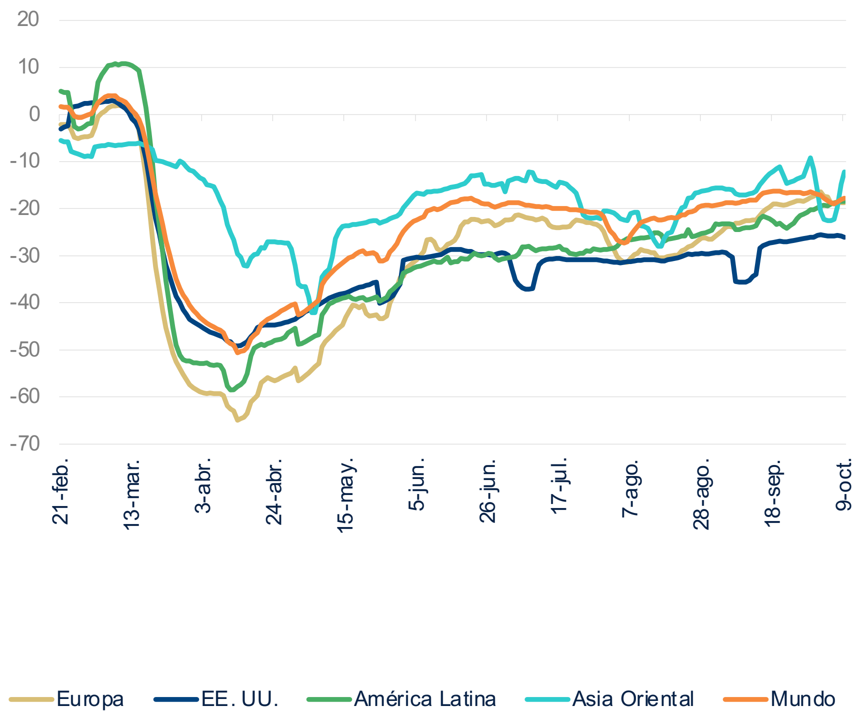
COMMITTED EXCLUSIVELY TO DIGITAL MICROPENSION INCLUSION IN ASIA, AFRICA AND LATIN AMERICA

COVID-19: a “tail effect” with supply-demand synchronized channels, uncertainty and persistent effects

- A global economic crisis of non-financial origins.
- Productive dislocation: although all productive activities were hit, key sectors where highly affected. This will make recovery complex all around the world.
- Multiple channels under siege: international financial markets, international trade, real sector
- Persistent uncertainty: <u>Supply</u>: should I invest? /<u>Demand</u>: should I consume?
- Supply - Demand loop effects
- COVID-19, second waves and non-linear effects

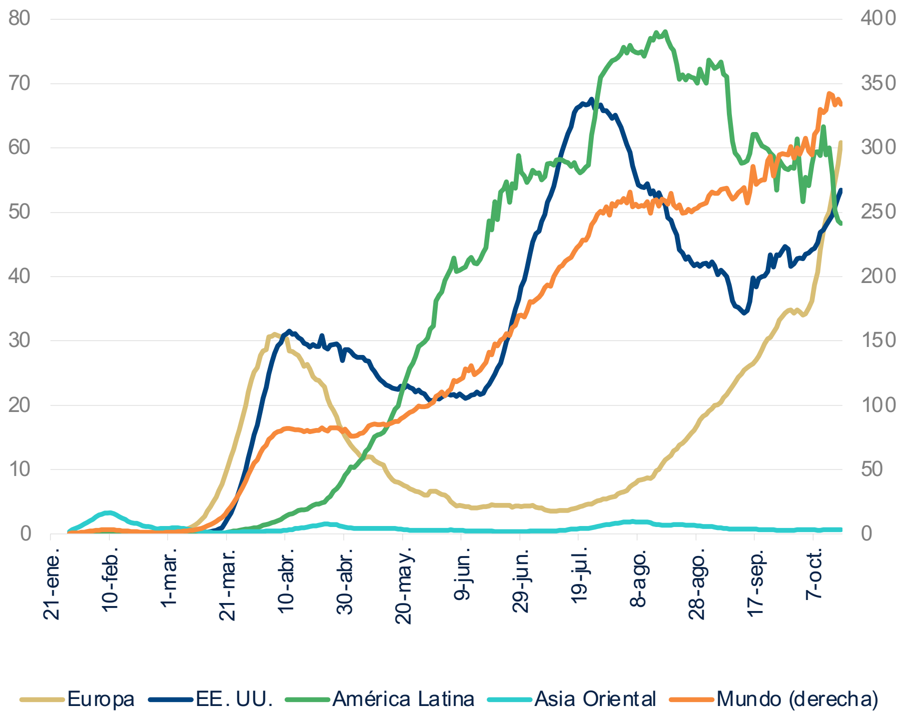
This story has not ended

Mobility towards workplace - Index



1 Source: BBVA Research / Google Mobility Reports.

Covid-19 Daily Cases – Moving average, 1000 people

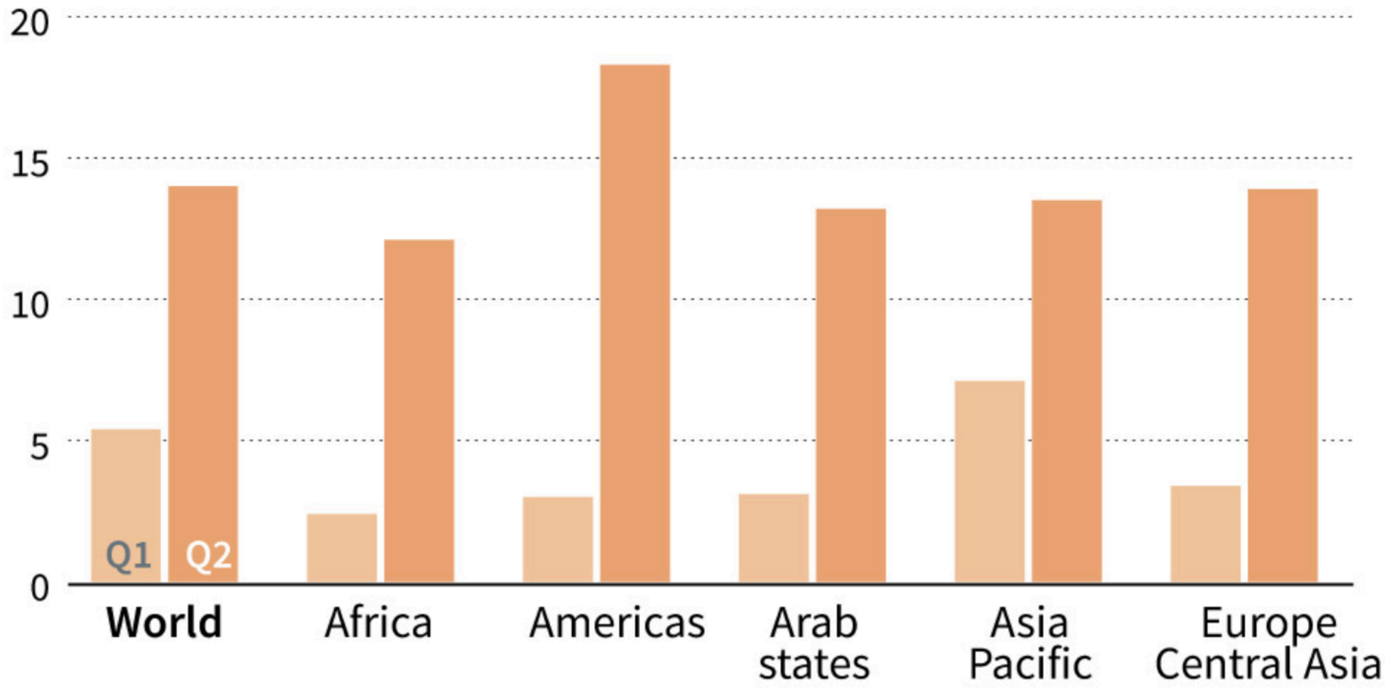


Source: BBVA Research / John Hopkins University.

COVID-19 impact on jobs

In Q2, 2020, the equivalent of 400 million full-time jobs were lost

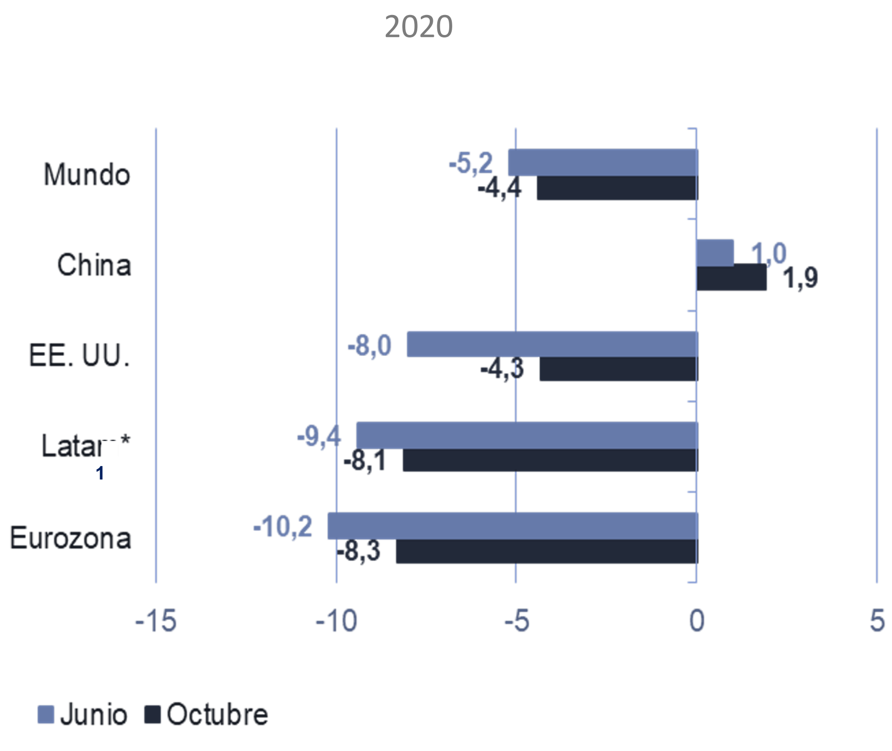
% of lost working hours in Q1 and Q2, 2020, compared to Q4 2019

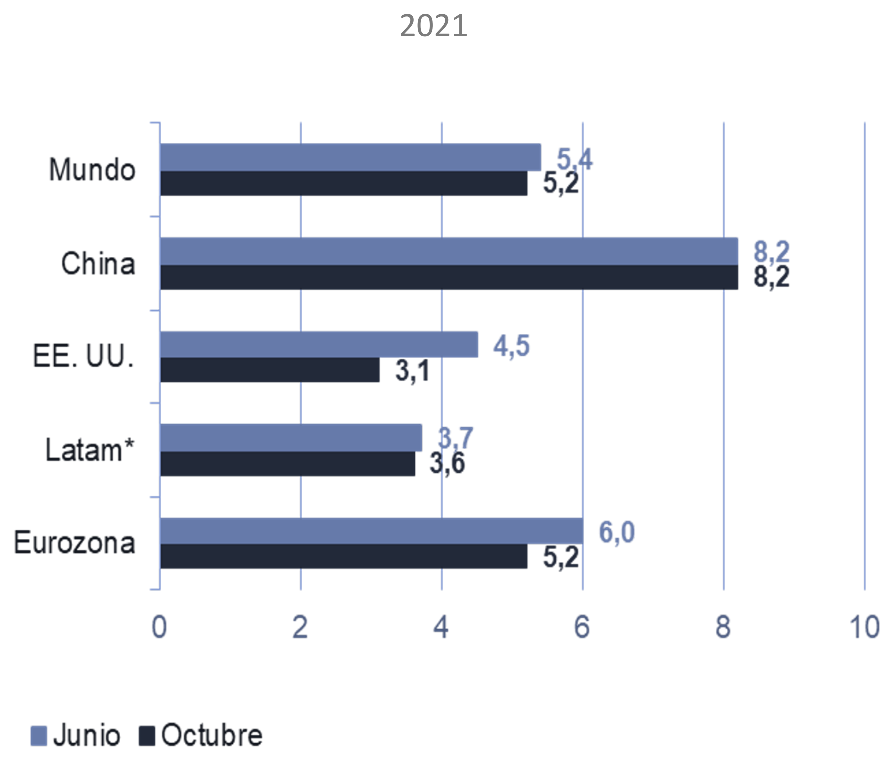


Source: International Labor Organization

Fall and rebound 2020-2021.....

GDP Economic Forecast

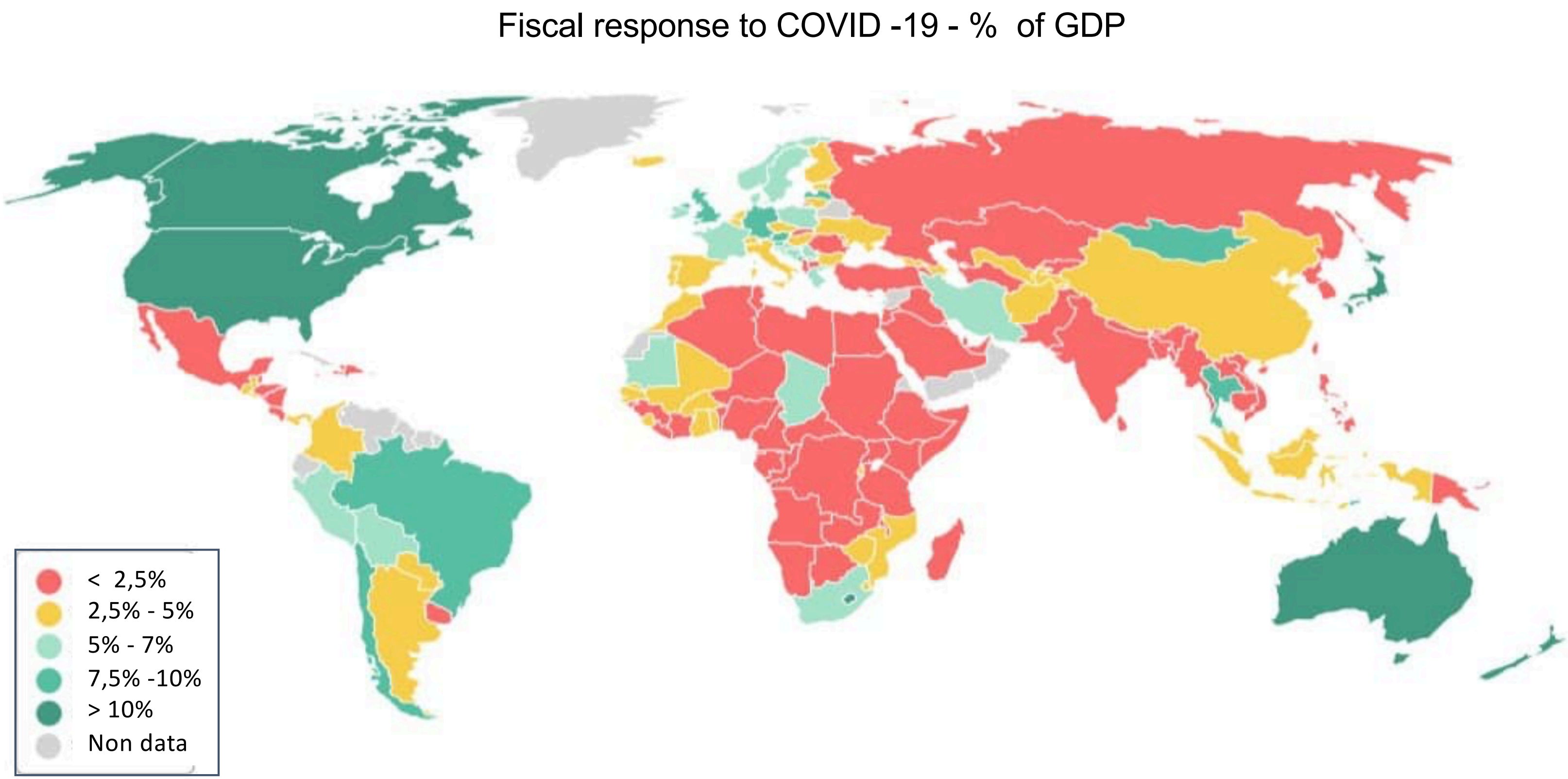




Source: World Economic Outlook, Octubre 2020 (FMI).

... but what will happen next?

Breaking the piggy pot



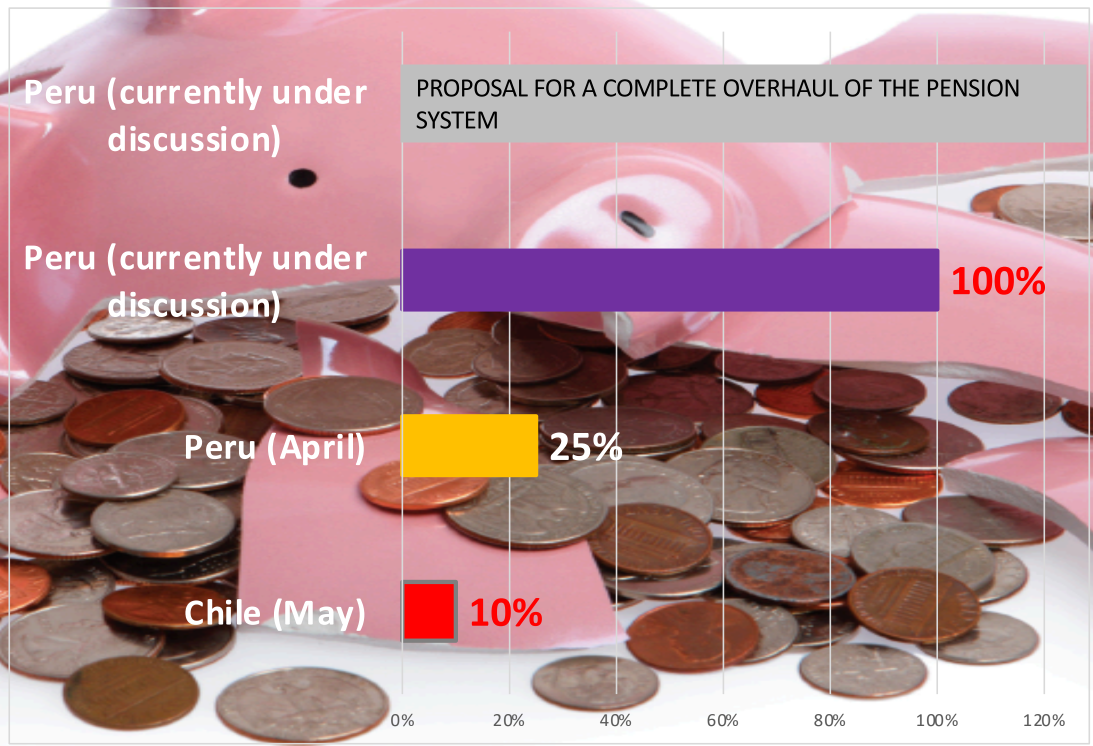
Source: MAPFRE

And also, breaking the pension piggy pot (and beyond)

Early access to pension saving available for Covid-19

Country	Participation	Access to pension	Taxed	Withdrawal purpose			
				Housing	Health	Other	Loan & repay
Malaysia	Mandatory	Yes	No	✓	✓	✓	
Singapore	Mandatory	Yes	No	✓	✓	✓	
Denmark	Quasi-mandatory	Yes	Yes			✓	
Netherlands	Quasi-mandatory	No	n.a				
Sweden	Quasi-mandatory	No	n.a				
Switzerland	Mandatory	Yes	Yes	✓			✓
Australia	Mandatory	Yes	Yes	✓	✓		✓
Chile	Mandatory	No	n.a				
Sweden	Mandatory	No	n.a				
Mexico	Quasi-mandatory	Yes	No			✓	✓
New Zealand	Voluntary	Yes	No	✓	✓	✓	
United Kingdom	Voluntary	No	n.a				
United State	Voluntary	Yes	Yes	✓	✓	✓	✓

Peru and Chile: Two countries where early access to mandatory pension savings **<u>"is"</u>** not permitted but….



Source: Worlbank 2020, García Huitron and Ponds (2015), and recent news

Pension systems were being impacted before Covid-19

Trends

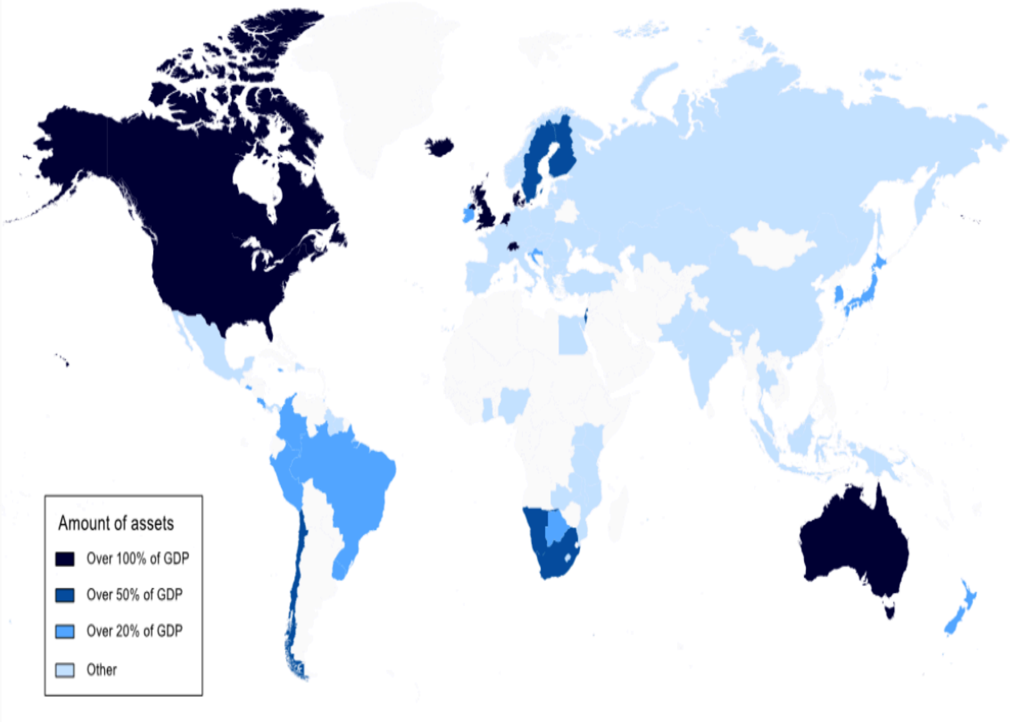
- Global Financial Crisis 2008-2009
- Demographic transition
- Third Industrial Revolution – Data Revolution
- <u>Financial unsustainability of DB, PAYG or similar schemes</u>
- <u>Moving high responsibility to people under more relevant CD schemes</u>.

Impacts observed

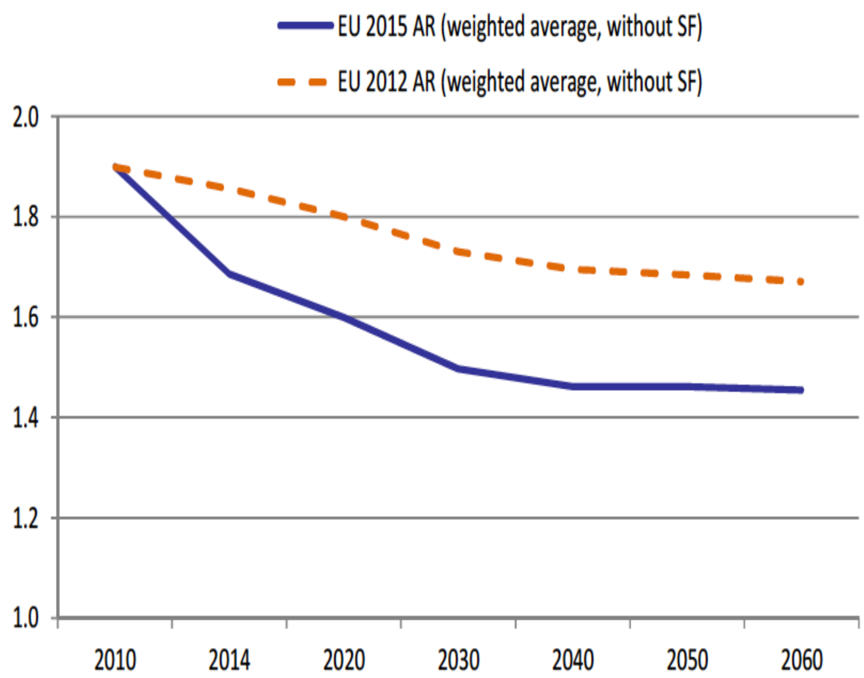
- Long term impact on long-term assets
- A decade of low interest rates
- Accelerated downsizing of DB/PAYG shemes: tough parametric adjustments
- Increasing importance of DC mandatory/voluntary pillars
- Formal/Informal Labor Markets <-> Rigidities v Flexibilities
- Gig Economy

Trends before Covid-19

Size of assets in funded and private pension plans in reporting jurisdictions, 2018 or latest year available /(% of GDP)



Average accrual rates for new pensions over the period 2010-2060 (%): 2012 AR versus 2015 AR



Source: OECD (2019) / European Commision (2016)

Covid-19 has accelerated previous trends in pension systems

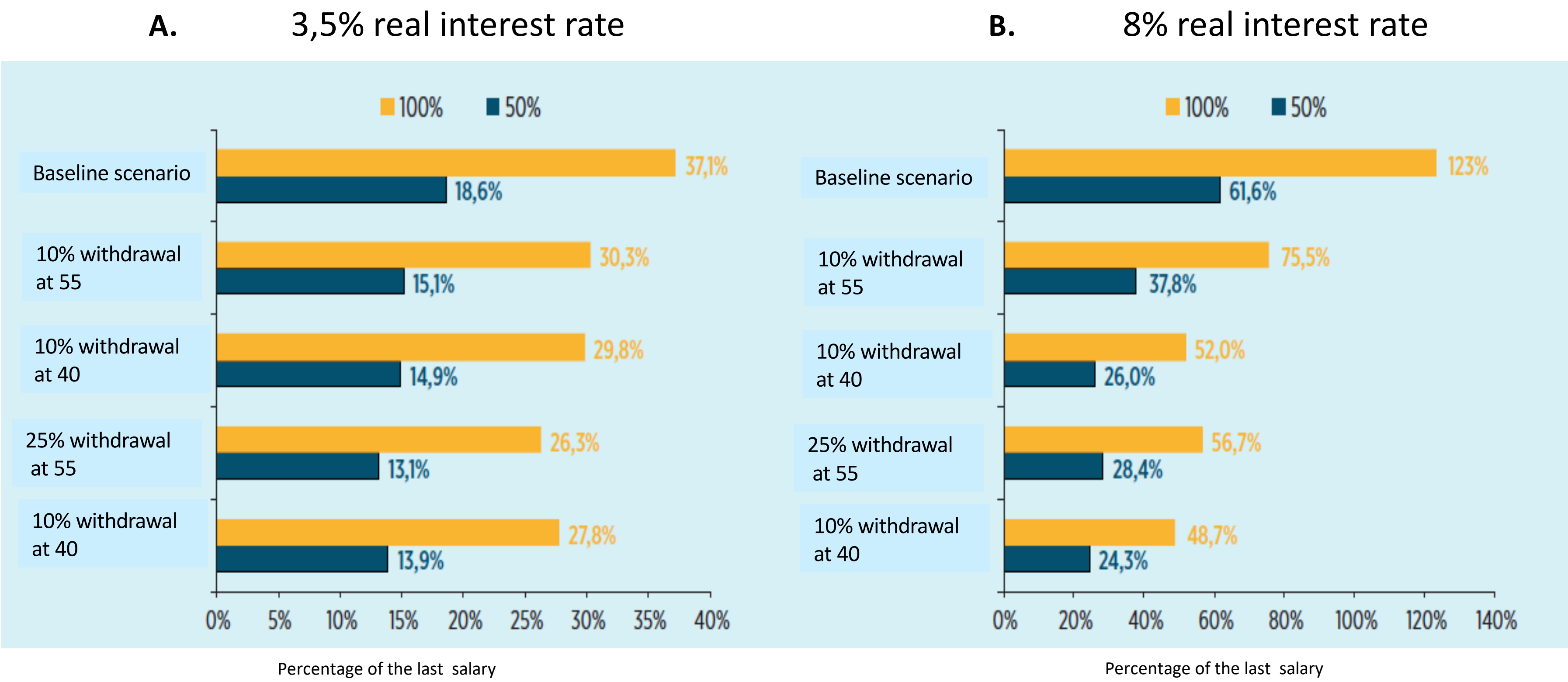
Covid-19 accelerates previous challenges

- A longer period of more depressed interest rates.
- Dragging effects on capital markets? How much and longer will be the effect?
- Covid-19 has accelerated labor market impacts: flexibility vs rigidity; neo-ludites? "Engel's Pause?"

Pension system hardly hit

- DB, PAYG and similar systems will be under more pressure around the world
- More parametric adjustment in sight. Pensions based on strong promises become unsustainable witouth adjustments or more downsizing. More funding, more fiscal deficits.
- Change of risk preferences on DC and DB plans
- Impact on labour careers and savings pot
- Impact on those more vulnerable (women, less educated)
- Reduced pensions and early retirement
- Reduced pension and early access to pension

Pensions will be hardly hit by early access to pension savings: the Peruvian case



Source: BID (2020)

Designing reforms

- Covid 19 will spur pension “reforms” around the world:

- The degree/type of pension reform will depend on the intersection of four vectors:

1. labor market institutions (formal/informal) - > An issue in Emerging Economies
2. degreee of financial desiquilibrium (private/public funded)
3. unstopable global trends (technological, demographics, others)
4. Cultural/idiosincratic preferences/institutions

A global issue

Designing reforms in Emerging economies: basic questions before starting

- Covid 19 makes social unprotection more evident
- A need for a pension reform but taking into consideration financial contraints
- How to match the empty consensus for a reform of a "Universal-Integrated-Multipilar" pension system:
  - What does it mean?:
  - Mutipilar (non contributory / mandatory / voluntary): what is the weight of each pilar?
  - How to finance a non contributory pension?
- How to finance a pension promise?
  - How much it cost?
  - Can we afford it?
- How to incorporate solidarity in a contributory pilar?:
  - Intergenerational/intragnerational
  - Among participants / from the budgets- taxes
- Keeping a pension promise: does your country/government have the institutional development to enforce parametric adjustments or increase taxes?
- Does your country/government have the institutional development to import complex systems that works in developed economies?
- How to incentivize people to save voluntarilty for retirement?
- Is retirement the most important shock from a life cycle perspective?: withdrawal; other mechanisms
- Are you avoiding the **"tunnel vision"**?
  - Does an increase in employer/employee contributions increases labor market informality?
  - Does the introduction of a non contributory pension incentivize informal labor markets?
  - Does a structural change from DC scheme to DB scheme (partial or total) will affect current institutional arrangement of property rights?
  - Does a structural change will impact capital market development, infrastructure financing, economic growth?
- The political- consensus stage: How are you designing your reform process from **BEGINNING** to **END**?

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Multi-trillion dollar problem and opportunity

Pension Landscape

600M
Salaried employees with pension benefits

1200M
Self-employed workers without pension benefits. Can afford to save for old age

600M
Below poverty line.
Cannot afford to save

Problem

2 billion
Elderly by 2050

80% of them will be living in Asia, Africa or the LAC. Majority will not get a pension and could face 20+ years of extreme poverty in old age.

A tax-funded social pension of $2/day to the excluded future elderly will cost $1 trillion a year.

Opportunity

By saving $1 a day, a 25 year old can enjoy an inflation-indexed monthly pension of $400 a month for 20 years starting age 60 (at 2020 prices)

If even 10% of the excluded informal workers save $1 a day for old age, they can generate $1 trillion in new long-term savings within the next 5 years.

Only sustainable option is to encourage and enable young, economically active informal workers to start saving for their old age.

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Barriers to comprehensive pension inclusion

	Fragmented ecosystem	Low commercial incentives	High friction and costs	Affordability constraints
Barriers	The digital financial inclusion ecosystem is fragmented and does not readily serve the retirement needs of lower-income informal sector workers.	Traditional, agent-led finance sales models and incentives make small-ticket pensions and insurance unviable at a disaggregated level — for both finance firms and distributors.	Cumbersome KYC and paper-based account activation. Increases cost of financial literacy, on-boarding and servicing. Inhibits voluntary mass-adoption of pensions and insurance.	Most informal workers are not insured. Use past savings and loans pay the full cost of (insurable) lifecycle risks. Surplus income is used to repay expensive emergency loans. Leaves no room for retirement savings.
pinBox Solution	Use pensionTech as “glue” to integrate and leverage the existing digital finance ecosystem for pension inclusion.	Aggregate demand by providing trusted channels easy, zero-cost, plug-and-play access to a digital micro-pension marketplace.	Leverage open platforms like WhatsApp for micro-pensions. Simple, familiar user-interface. Optimizes access. Nullifies digital literacy efforts and costs.	Integrate pension with liquid savings and insurance. Provides liquidity. Releases surplus income for savings. Makes pensions more affordable and attractive.

Designing reforms

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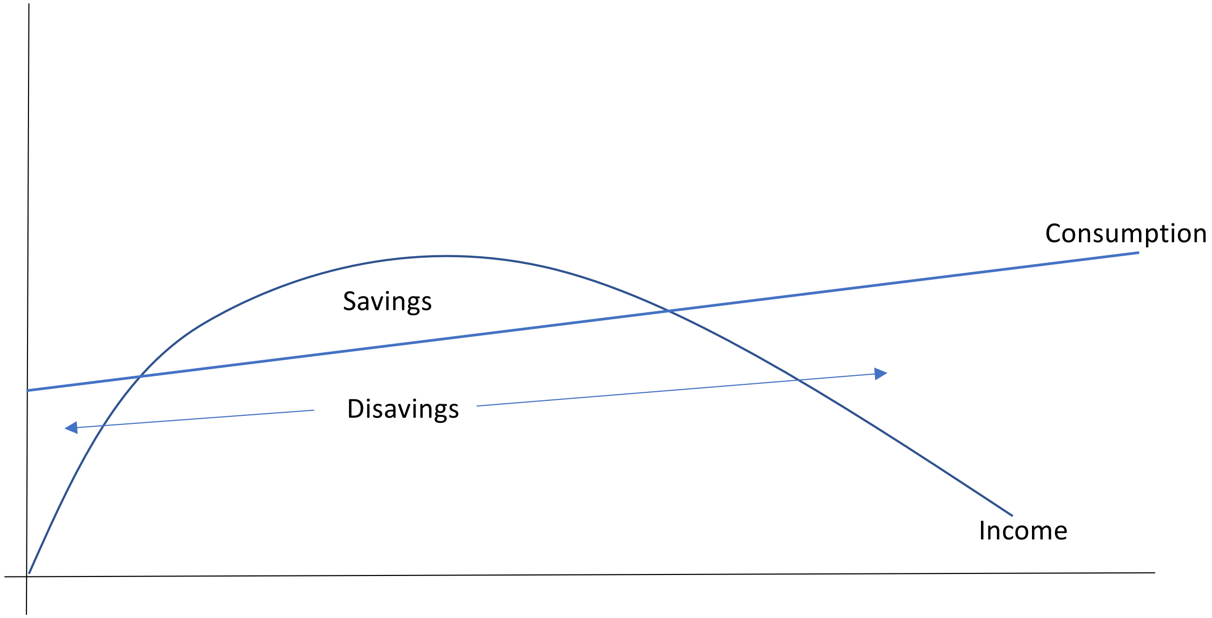
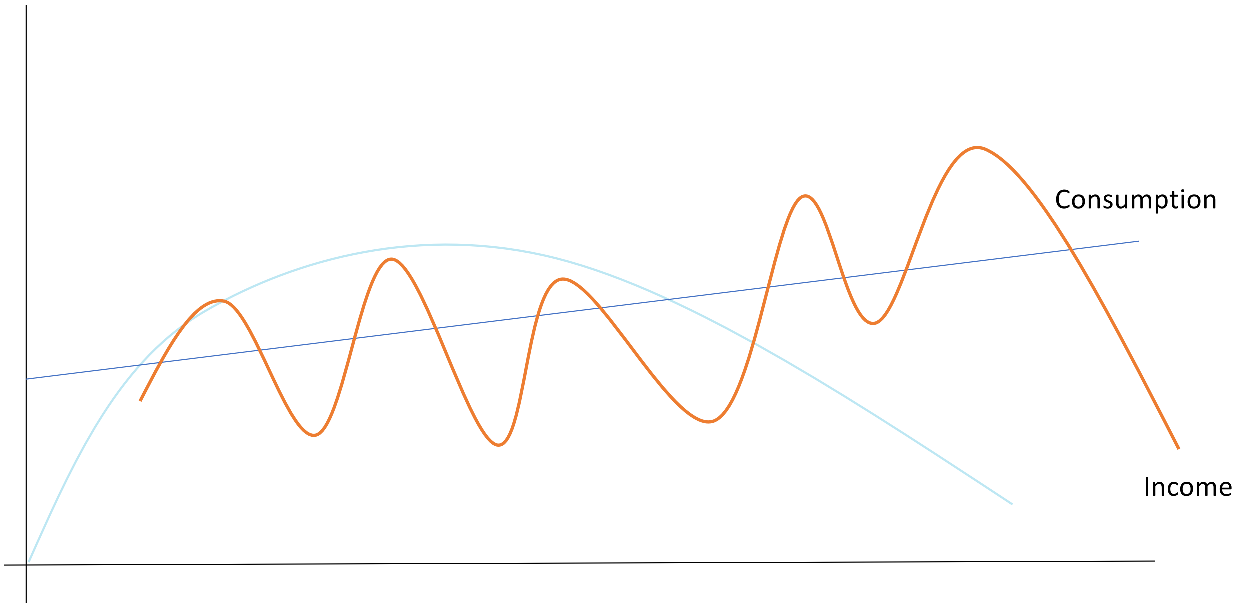
A global issue

Designing reforms from a global perspective: how to face multiple shocks? an issue that Covid-19 has accelerated



- Pension systems will gradually move from a three stage Life-cycle hypothesis ….

Designing reforms from a global perspective: how to face multiple shocks? an issue that Covid-19 has accelerated



- Pension systems will gradually move from a three stage Life-cycle hypothesis ….

- … to a multistage Life-cycle hypothesis to tackle increasing multiple shocks:

  - More frequent natural disasters
  - Pandemics?
  - Up-skilling, re-skilling to face the risk of labor market transformation …
  - … digital effects
  - ….. Longevity effect

- Necessary to rethink the whole concept of pension savings

- Incentive to save for continuous and long-term shocks: behavioral economics and digital platforms

Market segmentation, INTEGRATED SOLUTIONS

Micro-pension

Simple and flexible long-term saving product with some liquidity benefits.

Group Insurance

Simple, low-cost insurance for Covid-19, airborne and vector diseases, death and disability.

Digital payments

UPI for direct transfer of periodic savings, premiums and benefits to and from product providers

Flexible Solution

Each subscriber is free to decide how much and when she wants to save as per her own savings capacity and income-flows.

100m

Domestic help

50m

Gig-economy workers

150m

Women micro-credit clients of NBFC MFIs

400m

Women SHG members, milk producers

300m

MSME employees and contract workers

BUILDING BLOCKS FOR COMPREHENSIVE PENSION INCLUSION ALREADY EXIST IN MOST DEVELOPING COUNTRIES

Covid-19 has exposed the economic vulnerability of self-employed workers.

Most workers ran out of savings within a few weeks of the lockdown. This added extreme social, economic and fiscal stress to the health crisis.

But has led to stronger policy and public realization about the importance of social security and savings.

PinBox Solutions: one of the 10 most innovative fintech solutions globally

PINBOX SOLUTIONS

September, 2019

Alliance for Financial Inclusion (AFI) recognises pinBox as among the 10 most innovative fintech solutions globally

Alliance for Financial Inclusion (AFI) members have adjudged the pinBox pensionTech solution as among the 10 most innovative fintech solutions globally. Parul Seth Khanna, pinBox co-founder and director, was the only woman fintech entrepreneur in this group of 10. She presented the pinBox pensionTech solution and model to over 900 distinguished delegates including central bank governors from nearly 60 nations at the AFI-GPF 2019 co-hosted by AFI and the National Bank of Rwanda (BNR) at Kigali, Rwanda. pinBox reiterated its deep commitment to helping build and deploy affordable, secure and inclusive digital micro-pension solutions for self-employed women and the

afi Members Working Groups Initiatives Events Publications Blog Careers COVID-19

Winners of AFI's first-ever FinTech showcase take a bow

Applications open for 2020 AFI Inclusive FinTech Showcase, find out more!

Congratulations to agricultural insurance provider OKO for taking first place in AFI's first-ever FinTech showcase at the 2019 AFI Global Policy Forum (GPF).

Chosen by a panel of expert judges and a popular vote among GPF participants, OKO won over the audience with its innovative product and pitch, beating stiff competition from nine other financial technology (FinTech) firms.

OKO provides crop insurance to smallholder farmers in Mali using satellite imagery and weather forecasting to simplify and automate claim management. It connects to mobile payment platforms, weather information providers and distribution tools, allowing farmers to be compensated instantly when specific thresholds are reached, such as insufficient rainfall or extreme temperatures.

In second place came Rwanda-based ride hailing platform Yego Innovation, which standardizes motorcycle taxi fares and allows drivers to accept cashless payments that are deposited directly into their mobile money or bank accounts. Drivers also receive detailed credit scores, helping them secure finance from banks. It is also assisting in the design and facilitation of personal accident insurance for drivers and passengers.

Third place went to Mexico-based Gestell, which uses artificial intelligence and automated processes to increase the efficiency of financial institutions. It operates platforms using application programming interfaces, cloud computing, machine learning, blockchain, data mining and robotic process automation to verify customers, analyze and monitor transactions and identify outliers and patterns to provide solutions to challenges, such as money laundering.

Well done to all the FinTech winners!

Below find a list of the remaining FinTech finalists:

IrisGuard

Founded in 2001, IrisGuard is a UK-based electronic payment solutions company that uses end-to-end iris recognition technology to provide financial services to some of the world's most vulnerable populations. IrisGuard technology has been used to enroll over 2.3 million Syrian refugees, allowing them to make cardless cash withdrawals at selected ATMs, blockchain transfers, remittances and food voucher replacements in supermarkets.

JUMO

JUMO uses data science and machine learning to create to financial tools that help unbanked and underbanked entrepreneurs -- particularly women --, access loans and savings products through cellphones. It builds and operates several services for millions of customers in Ghana, Tanzania, Kenya, Zambia, Uganda and Pakistan, including savings products that bear interest and short-term, structured credit products. It also provides credit that can be configured to fit the needs of individuals, as well as insurance products to safeguard incomes, families, assets and businesses.

KlickEx

KlickEx provides a network of non-bank clearing infrastructure in the Pacific Islands. First launched in 2009, the payments infrastructure company maintains remittance flows in a severely de-risked ecosystem and provides, builds and operates a variety of clearing systems, mobile money operations, national payment infrastructure, know your customer and anti-money laundering and counter financing of terrorism platforms, bio-metric identity systems and production blockchain systems.

People's Pension Trust

People's Pension Trust provides pension products to people working in the formal and informal sector with the aim of reducing old-age poverty in Ghana and Rwanda. Its products allow clients to save daily, weekly or monthly through mobile payments, using direct debit or community-based groups and associations. A subsidiary of the Netherlands-based People's Pension Holding, its goal is to provide affordable pension products to four million people in the informal sector by 2027.

pinBox

pinBox, short for "pension-in-a-box", is a Singapore-based technology firm that supports digital micro-pension inclusion across Asia, Africa and Latin America and the Caribbean. It helps countries, financial inclusion stakeholders and large pension funds to design, build and deploy inclusive micro-pension programs that enable young, low-income people working in the informal sector to save for their old age.

Sinitic

Sinitic uses artificial intelligence (AI) to run multilingual contact centers that bridge cultural and linguistic gaps, enabling higher deflection rates and increased customer value. Launched

https://www.afi-global.org/news/2019/09/winners-afis-first-ever-fintech-showcase-take-bow

THANK YOU !

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