

Migrant Pensions: Leveraging the SIMPLE Success of Brazil's Innovations to Solve a Global Issue

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ARUN MURALIDHAR, PH.D.
Georgetown University, Adjunct Prof. of Finance
Co-authored with Leandro Sarai, Brazil Central Bank
and Sid Muralidhar

Investment Technologies

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Agenda: Migrant Pensions – A Possible Solution?

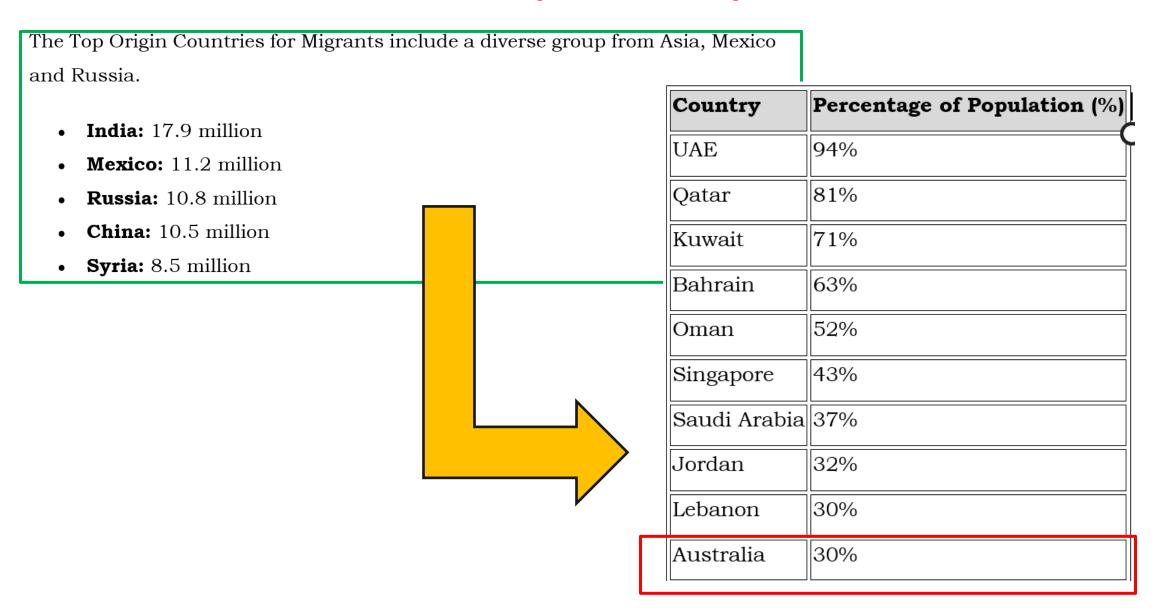
- 1. The Challenge for Migrants and Size of Problem
- 2. Brazil's RendA+ and Educa+ Innovations (and How Digitalization = Financial Inclusion)
- 3. A Possible Solution
- 4. Why It is a Win/Win/Win

A Simple, Low-Cost, Modification to an Existing Security, and Leveraging the Blockchain, Could Quickly Address Many Challenges Migrants Face in Achieving Retirement Security



Migrant/Stateless Retirement Security:

Size of the Problem (> 100 Mn)



Country	Number of Migrants
United States:	51 million
Germany:	15.8 million
Saudi Arabia:	13.5 million
Russia:	11.6 million
United Kingdom:	9.4 million
Spain:	6.8 million







Migrant/Stateless Retirement Security:

Nature of Work and Absence of "Home" Country

- **❖** Informal Work Cash-based and Hence No Access to Formal Systems
- Low Financial Literacy
- **Come from Countries with Weak Currencies/Economies**
- Often Unbanked Because Scared of Retribution/Deportation
- Stateless (e.g., Palestinians in Jordan) For No Fault of Their Own
- * May Have Been Employed in Many Countries and Retire in Another



Yet the Goal is: Be Able to Maintain Pre-Retirement Lifestyle until Death

Need an "Out-of-the-Box" Solution

Going to Have to Be Transnational = Need An Enlightened Agency (UN, ILO, MDBs)
Critical To Solve as this is a Growing Crisis (and Leading to Political Upheavel)

Sidebar on "Wealth" As Objective

Finance Theory Starts With Wrong Objective

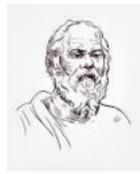
Assumes that "Investors Want to Maximize Utility of Wealth" - We Need Income

"If a man is proud of his wealth, he should not be praised until it is known how he employs it."

Socrates

"When it is obvious that the goals cannot be reached, don't adjust the goals, adjust the action steps."

Confucius







We Care About Retirement Income = Relative Wealth (Not Absolute Wealth)

Book: "Investment Theory and Practice: It's All 'REAL-ATIVE'"

https://repository.library.georgetown.edu/handle/10822/1088947



Sidebar: DC Pension Plans Have Multiple Challenges

Could Lead to Widespread Retirement Problems

- Risk transferred to Individuals (one lifetime)
- **∑** Complex Decisions transferred to individuals
 - ⊠ How much to save?
 - ⊠ How to Invest: What to buy? How much? Rebalancing?
 - ⊠ How best to decumulate? What annuity to buy?
- Financial Illiteracy confounds decision-making
- High Cost from involvement of multiple parties
- **☑ Declining Real Payments** with Nominal Annuities
- **☒** Informal Employment





But Goal Unchanged: Seek Guaranteed Real Retirement Income;

Not Guaranteed Return on Investment!! TEKA MUST ADDRESS THIS ISSUE



DC Pension Plans: What Do Individuals Want?

Clear Preference for Steady, Lifetime Income; Safety and Control Not Guaranteed Return in APY

MEDIAN PREFERENCE WEIGHTS











Case Study: Brazil - (Award-Winning) RENDA+

On January 2023, the Tesouro Direto Program launched RendA+, a new bond to complement investors' Retirement from Social Security

As of Nov 2024, the new bond has already reached

more than R\$ 2.8 billion in outstanding (appx.)

104,000+ investors, INCLUDING 20,000+ NEW INVESTORS = FINANCIAL INCLUSION

All done on a SIMPLE APP = DIGITALIZATION (ALLOWS TO BE GLOBAL/MOBILE)

Can purchase in slices of as little at A\$1 at a time = **DEMOCRATIZE**

For Education Bond – each recipient of cash flows has a QR Code



Congrats to #Brazil Tesouro Nacional and B3, selected as runner-up for Pensions & Investments #WorldPensionSummit in the "Pension fund design and reform" award category. This innovation is going to be adopted/adapted around the world



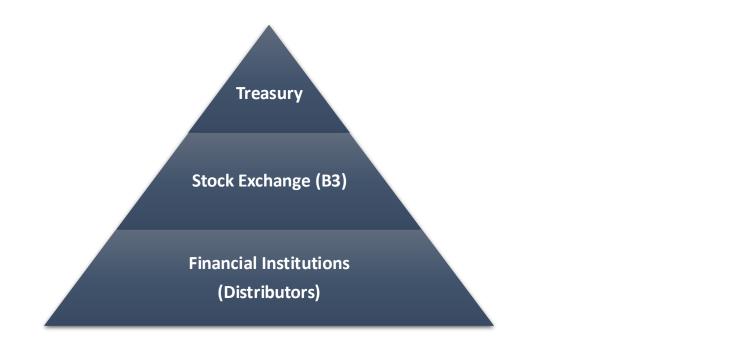
We are thrilled to announce the winners from last night's inaugural Institutional Investor Recognition Awards! Their hard work, dedication, and innovation have truly set new standards in the industry.

Congratulations to:

Giorgio Fano – Innovator of the Year Winner

"Tesouro Direto" Program – Low Cost and High Transparency

- The program was launched in 2002 in a partnership with the stock exchange (B3) to democratize access to domestic government-issued bonds (**no funding purpose**).
 - To attract small customers:
 - Minimum ticket is only about US\$ 1.00;
 - Transparent, with competitive fees (average cost of 20 bps per year, accrued daily)
- The structure chosen at that time was an outsourcing structure



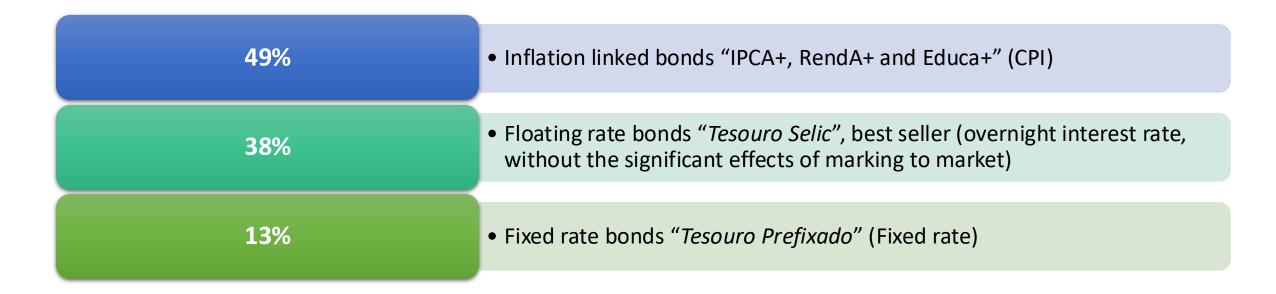
2.7 million customers

Outstanding of BRL 150 bn (1.4% of GDP) (2.1% of the FPD)

"Tesouro Direto" Program

The Treasury has adopted a more retail-oriented strategy

Bonds designed for retail demands such as retirement and children's education (inflation liked bonds)



- All early redemptions are carried out at market prices (marked to market)
- All bond prices are updated at least three times a day for investments and redemptions
- Investors value features such as daily liquidity, security and low-price volatility

"Tesouro Direto" Program – New "Tesouro RendA+" and "Tesouro Educa+"

Example: Cash flow of a "Tesouro RendA+ 2030"

Period of monthly payments
(20 years)

Constant real income

2030
Retirement date
End of amortization period

Period of monthly payments
(5 years)

Constant real income
Investor purchases

2026

2030

End of

amortization

period

Beginning of

college

Main characteristics of the new bond:

- Inflation linked bond
- Pricing: Discounted at a real interest rate
- Sold and cashed at market prices
- Investor chooses the conversion date, i. e. 1st amortization date
- There is not payment of interest before the conversion date
- 240 monthly amortizations (20 years)
- Amortization = Nominal Value/240
- Number of bonds: 8, maturing every 5 years

Main characteristics of the new bond:

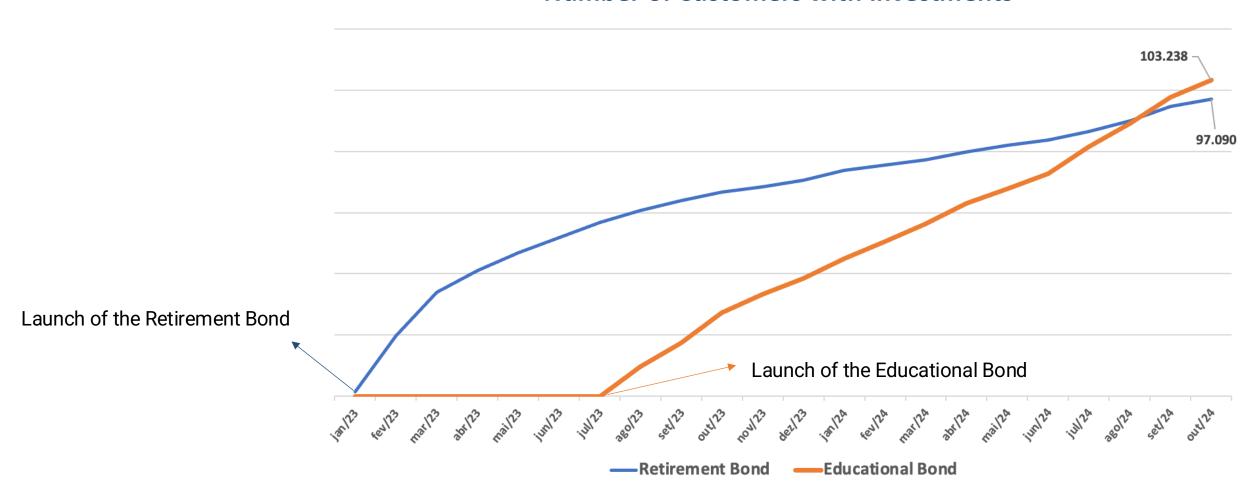
- Inflation linked bond
- Pricing: Discounted at a real interest rate

Example: Cash flow of a "Tesouro Educa+ 2026"

- Sold and cashed at market prices
- Investor chooses the conversion date, i. e. 1st amortization date
- There is not payment of interest before the conversion date
- 60 monthly amortizations (5 years)
- Amortization = Nominal Value/60
- Number of bonds: 16, maturing every year

New Customers and Average Ticket

Number of Customers with Investments



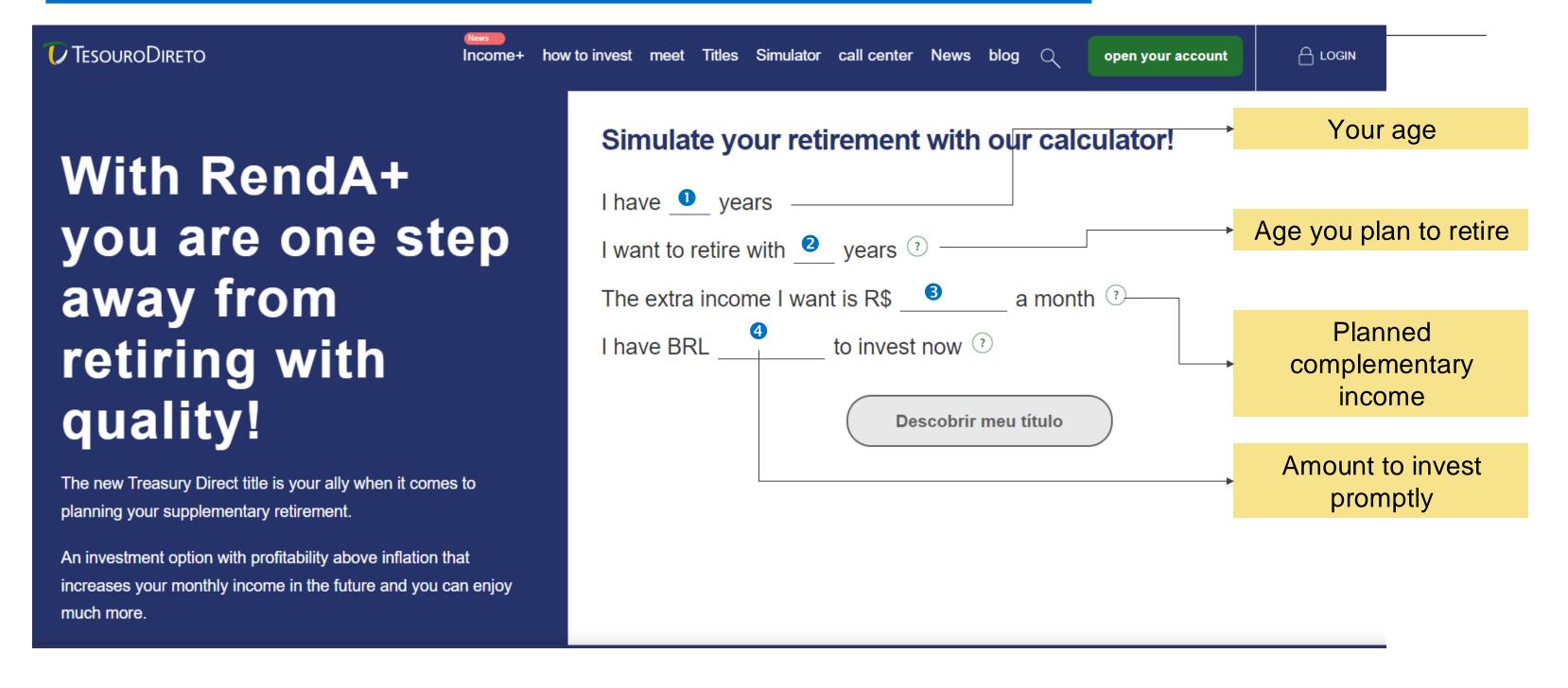
Average ticket (Retirement Bond) = BRL 29.3 (USD 4.8 K)

Average ticket (Educational Bond) = BRL 7.3 (USD 1.2 K)

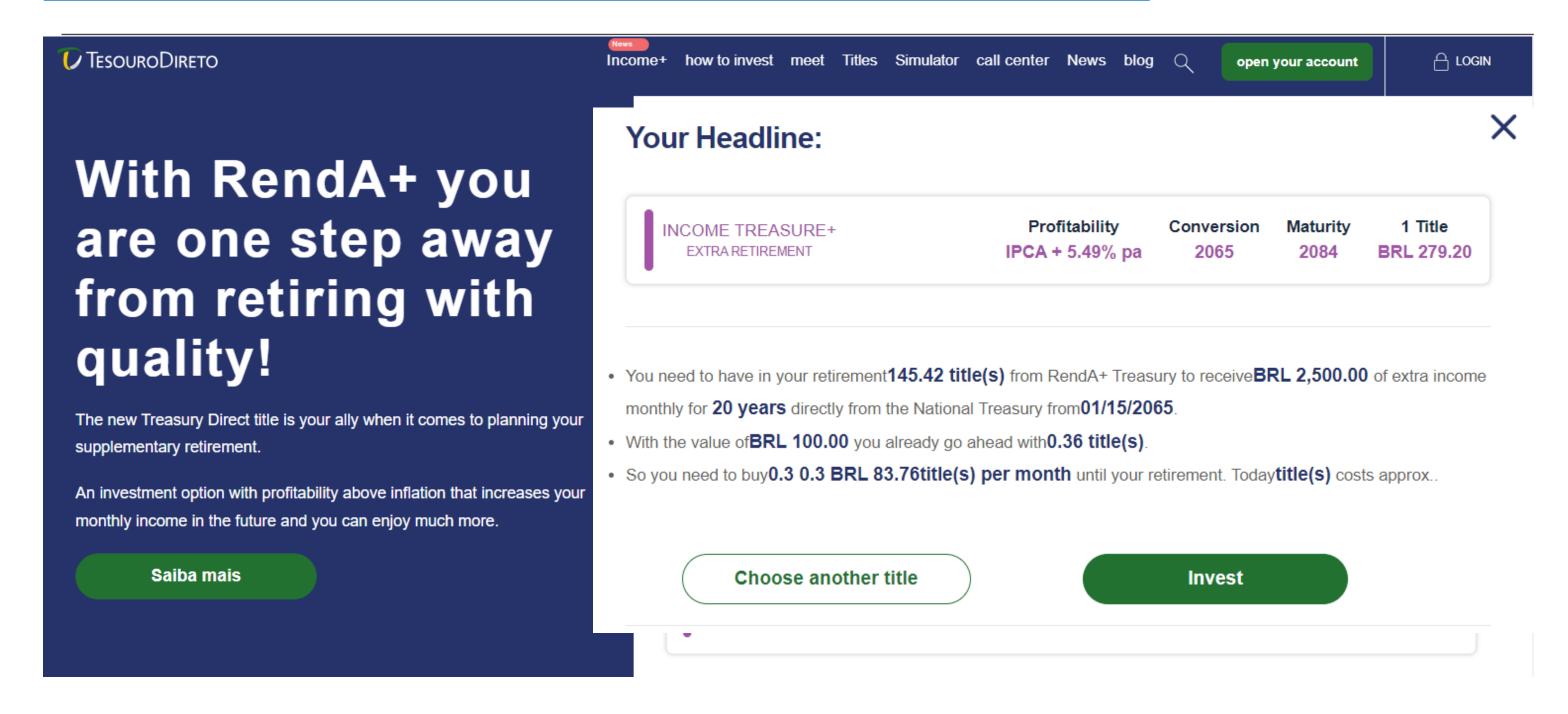
Outstanding = BRL 2.8 billion (USD 0.5 billion)

Outstanding = BRL 0.8 billion (USD 0.13 billion)

THE APP: TWO SIMPLE QUESTIONS



THE APP: TWO SIMPLE QUESTIONS



Source: National Treasury. Available at: https://www.tesourodireto.com.br/rendamais/, in 20/06/23.

Migrant Solution: SIMPLE (Secure retirement Income for Migrants for Pensions in a Ledger Electronic)

Migrants references by μ_i , μ_i , μ_k

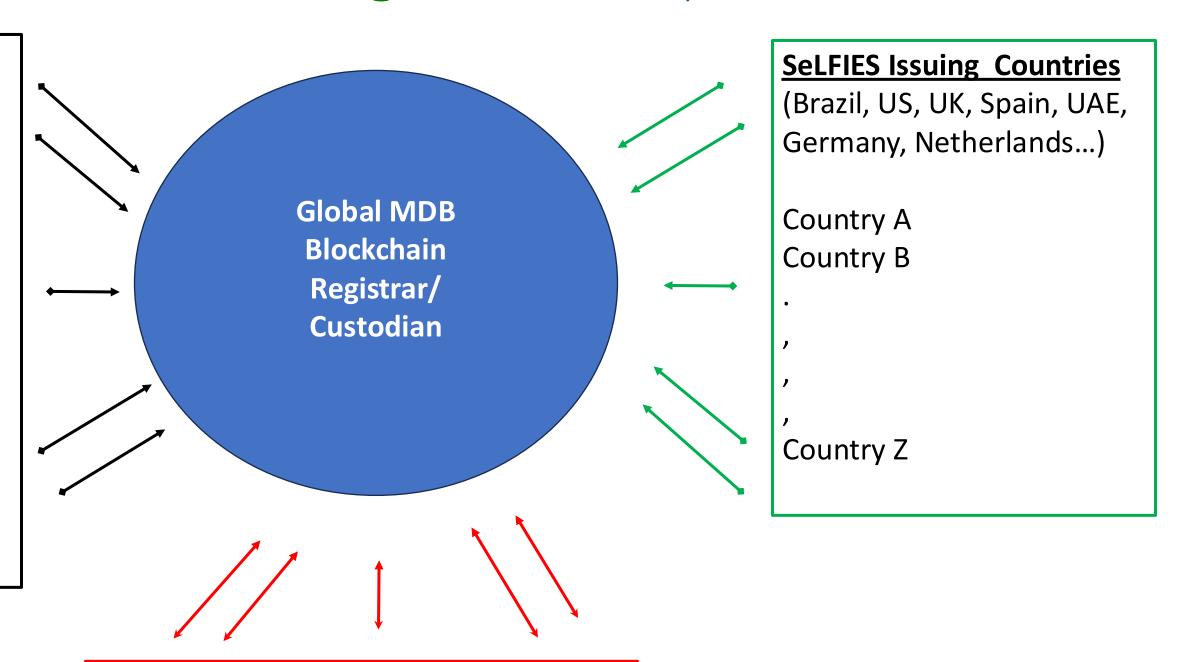
Migrants from Countries

(Philippines, Argentina, Colombia, Venezuela, Dominican Republic, Sri Lanka, Africa)

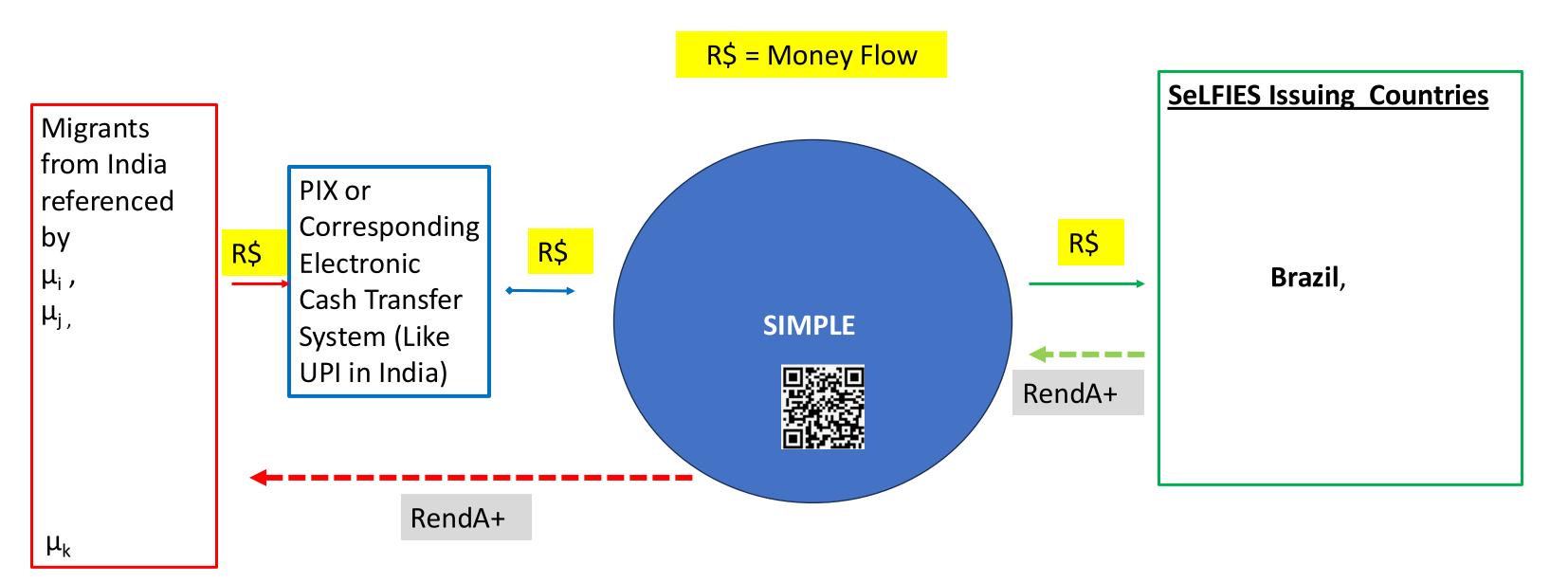
Country 1
Country 2

,

Country 50



Migrant Solution: Maintain a Global Registry on the Blockchain



RendA+ = Accounting Record and Pension Payment Flow

Migrant Solution – Leverage Brazil

- Preserves Anonymity of Migrant (Retribution Fear)
 - ✓SIMPLE is the holder of record for issuing country
- Eliminates Cash Transactions
 - ✓ Saves Migrants from Having to Carry Cash/Records
- **❖** Payable in Currency of Choice at Prevailing Spot Rate
 - ✓ Easily run by The World Bank Treasury etc.
- Liquid, Low-Cost, Inheritable, Low-Risk, Small Sizes
 - ✓ Brazil lowered minimum investment to \$1/time
- **Portable**
 - √ Not Tied to Employment, Country of Work, Country of Origin

SeLFIES a good look for Australian retirement





Just Needs a Transnational with Creativity and Willingness to Do This



SIMPLE – Great for Governments

- **√**Reduces Risk of Retirement Poverty/Bailouts
- **√** Cash Flows from Bond = Green/Infrastructure Needs
- **√Governments Like Spain Have a Ministry of Migration**
- **√Can Be Gifted Alternative Form of "Matching"**
- **√Fairness**
- **✓Leverages Multinationals to Have Real Social Protection**Impact







SIMPLE: A Win/Win/Win (If Someone Acts)

✓ Individuals

Migrants treated with dignity as they get financial security in retirement

✓ Governments

Take care of workers that work in their countries who could become a burden

✓ MDBs (World Bank, IMF, UN, ILO)

Deliver a real solution to the folks they are supposed to serve

Who Takes Care of Them? Vilified By Politicians

Is There a Leader at a World Bank, UN, ILO, IADB etc Who Cares About Them?

