

# **Early career scientists**

## **Medical Device Design, Biotechnology and Entrepreneurship**

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**ATango Meeting**

11<sup>th</sup> May 2022

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# What's it like being an entrepreneur?

## Entrepreneurs



What my mom thinks I do



What my friends think I do



What society thinks I do



What investors think I do



What I think I do



What I really do

## Four key components to a life sciences startup

- Intellectual property
- People
- Money
- Unmet needs



“The invention is the easy part”

# The Unmet Needs

1. What is the problem you are solving?
  2. Whose problem is it?
-

How does investing in your  
startup solve the investors'  
problem?

# Money is everywhere!



Ltd/plc/Inc/GmbH/AG/SA/SpA/AS/AB

Bonds

Shares

Debt

Capital gains

FX

Hedge fund

Mutual fund

Futures

Options

Warrants

Banking

Taxes (and negative tax)

Spread betting

Sweat equity

Board of directors

Supervisory board

Shareholder

Arbitrage

Balance sheet

Cashflow

Profit and loss

Junk bonds

EIS

EMI...

## Cash



## Credit



## Property



# Look more closely at cash

**Notes are promises/obligations**

...but promises can be broken...





# Promises can be broken...

Germany - 1924



Hungary - 1946



Zimbabwe - 2008



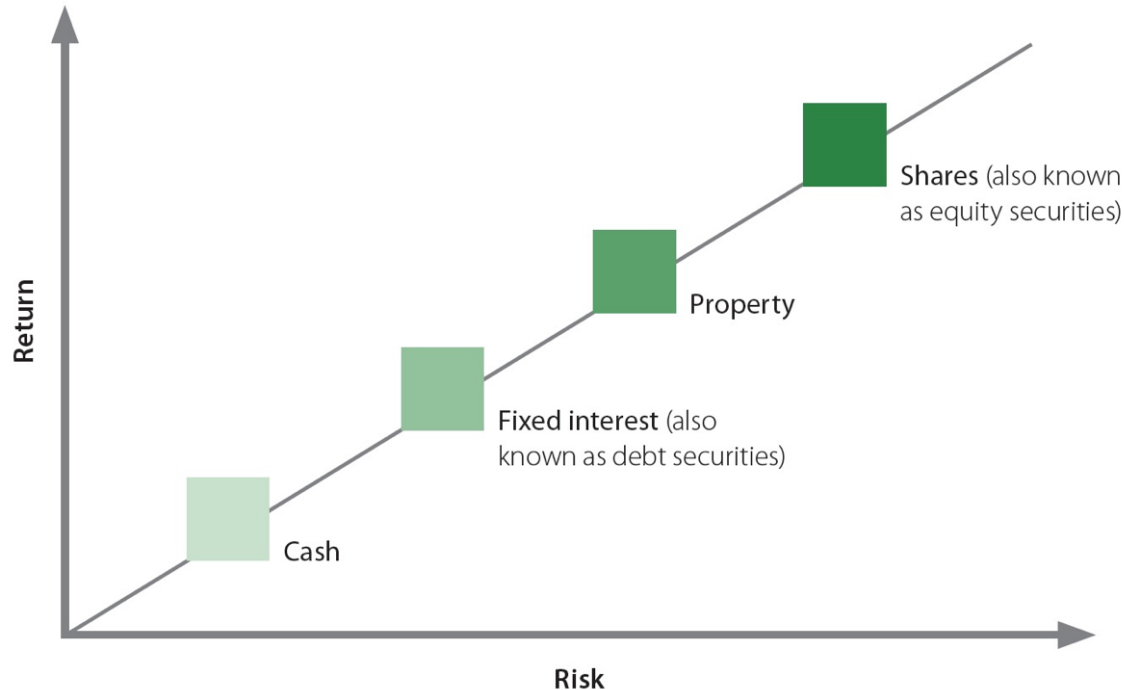
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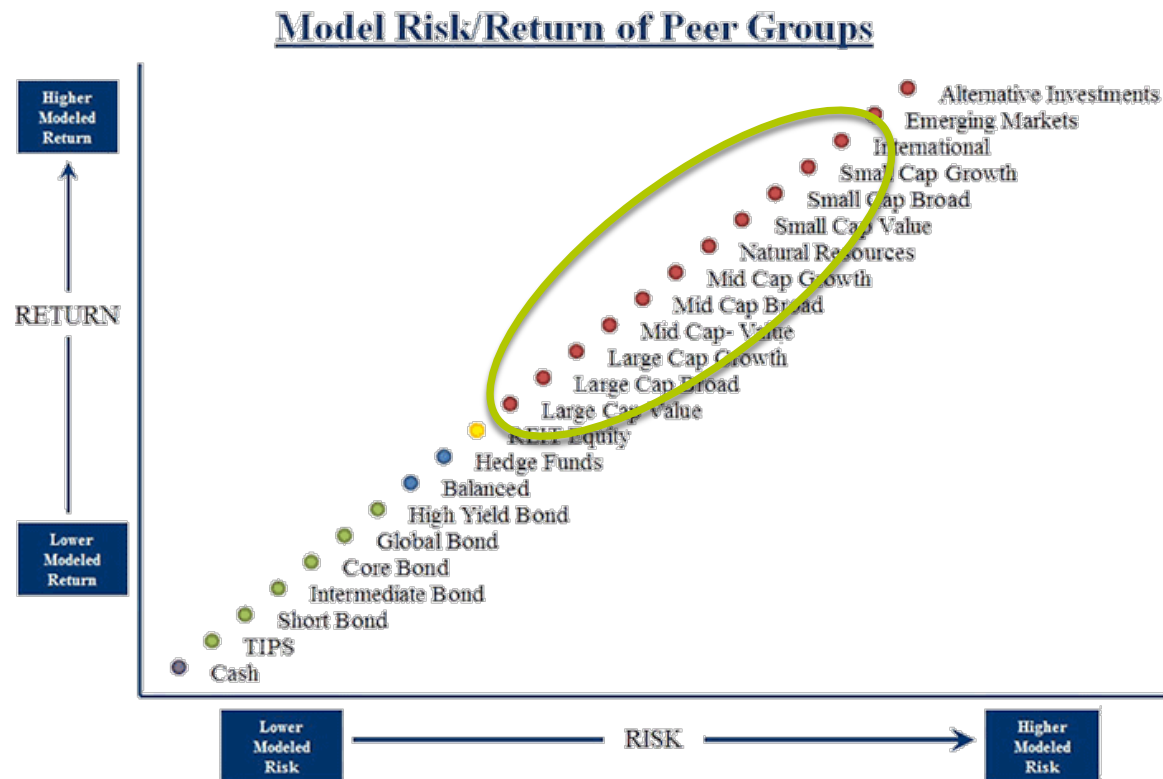
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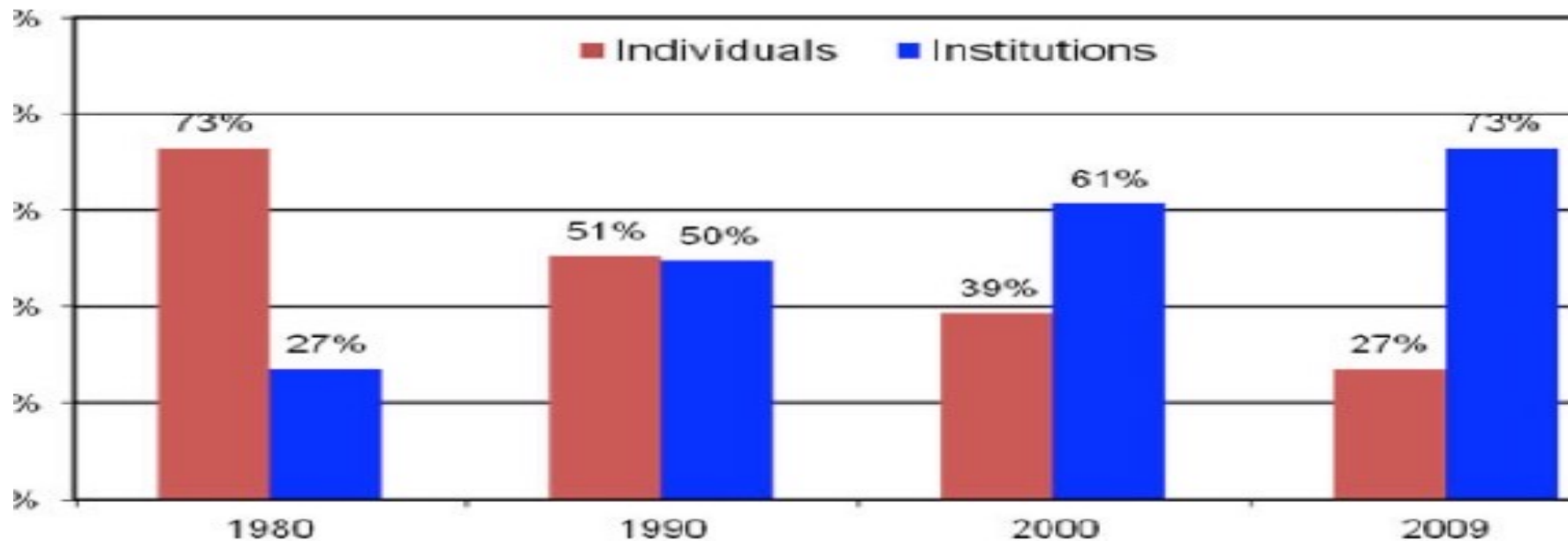
So even banknotes have a risk. Risk is unavoidable.

People take risks if they are paid to take risks...  
...this is call “the return”





## Who owns shares, fat cats or you? (who is taking these risks?)



# Who are “institutions”? What are the problems to which the solution is investing in you?

- They are collective entities
  - **Pension funds\***
  - Insurance companies
  - Hedge funds
  - Sovereign wealth funds
  - **Family offices**
  - Private equity – buyout or **venture capital** (some are specialised)... but they get their money from other institutions

And they all want a “return”

(this is the problem you are solving, and to get investment you have to show how that will happen)

\*The largest category, with  $>\$20 \times 10^{12}$  globally

(source: Economist/JP Morgan)



# Entrepreneur



What my friends think I do.



What my mom thinks I do.



What society thinks I do.



What my boss thinks I do.



What I think I do.



What I actually do.

# Ask me anything...

Bonds  
 Shares  
 Debt  
 Capital gains  
 FX  
 Hedge fund (e.g long, short)  
 Mutual fund  
 Futures  
 Options  
 Strangles, straddles, iron condors...  
 Warrants  
 Banking  
 Taxes (and tax credits)  
 Certificates of deposit  
 Contracts for difference  
 Spread betting  
 Sweat equity  
 Board of directors  
 Supervisory board  
 Shareholder  
 Arbitrage  
 Balance sheet  
 Cashflow  
 Profit and loss  
 Junk bonds

A company



A stock market



Money



# But it has been hard to get for 4000 years 🤔 A-TANGO

Code of Hammurabi  
(1754 BC) recording  
interest-bearing loans

Debt probably preceded money!





# Guilds, banks, accountancy and money



Goldsmithing a chalice

Problem: how do we store valuables?

Solution: Deposit with your guild (and make sure you get a receipt\*).

\*paper money first traded in 11<sup>th</sup> century China, still traded today. In a way, each piece of “receipt” is a debt



Florentine bank in the 15<sup>th</sup> Century

And banks issue bank notes...