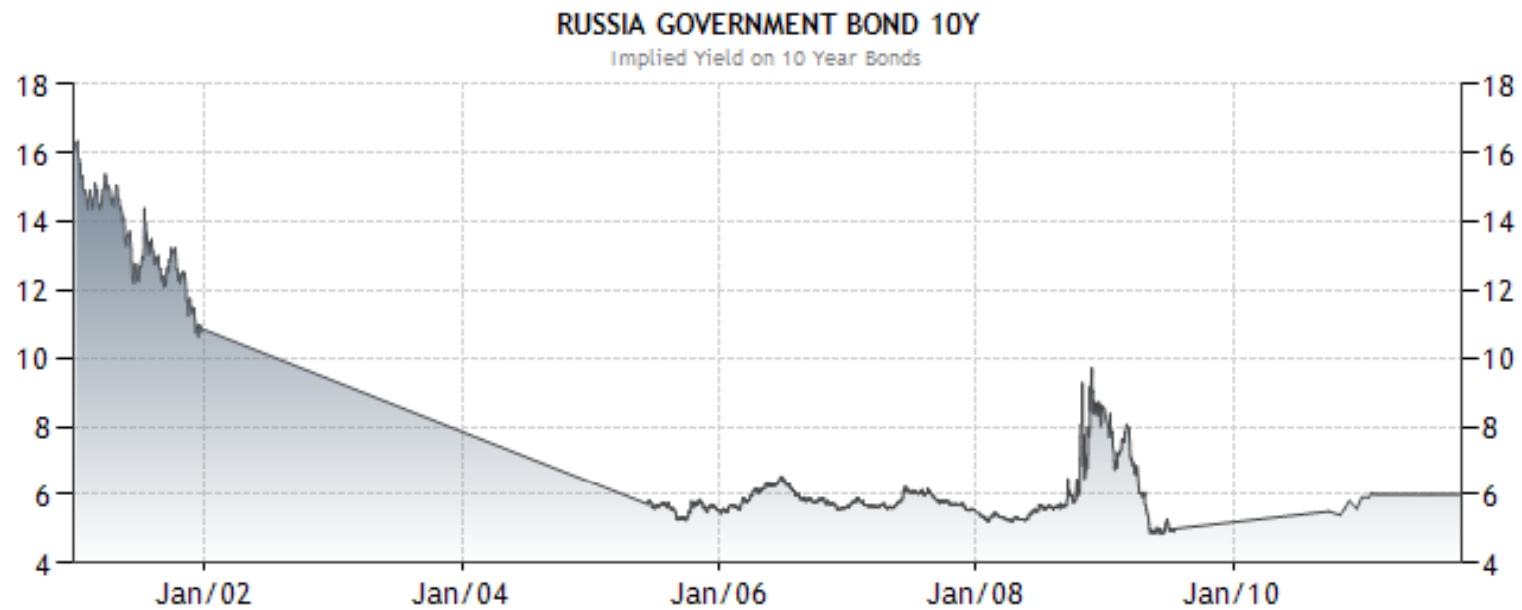


# New ways of sustainable funding for R&D – between government bonds and venture capital investment

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HSE

# Looking good...



source: TradingEconomics.com; Russia Department of Treasury

# ...but

- The Finance ministry sold 4.6 billion rubles (\$321 million) of government domestic bonds due April 2021 at the upper end of its yield guidance in an auction Sept 13, according to a statement by the ministry after the central bank's rate decision.
- The government cut the amount on offer earlier this week from 35 billion rubles to 10 billion rubles and set the yield guidance at 8 percent to 8.1 percent yesterday

### RUSSIA STOCK MARKET



Source: TradingEconomics.com

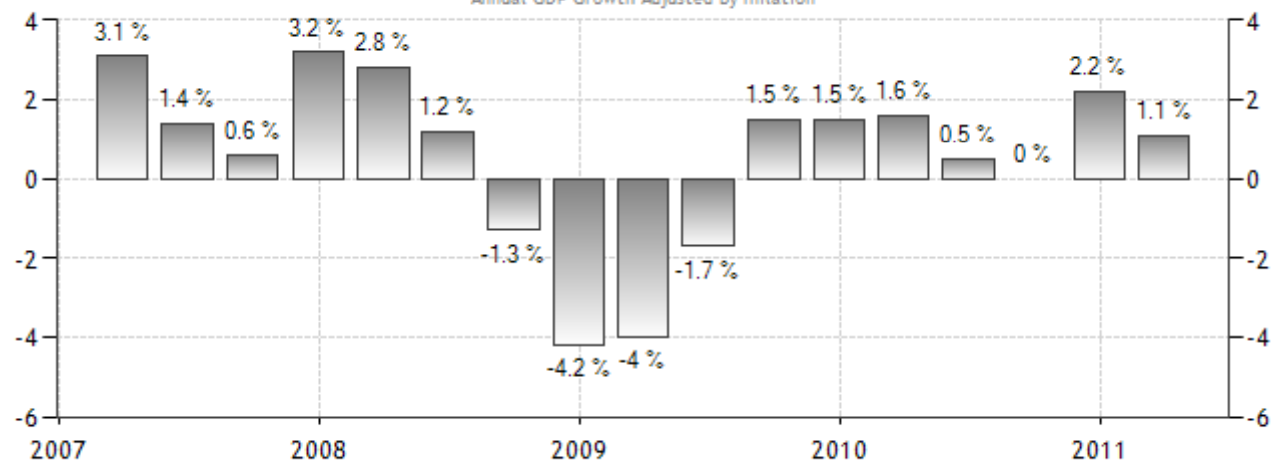
...but

“Because of the violence of the decline in 2008, there’s a feeling that if something bad happens around the world then it will be very bad in Russia”

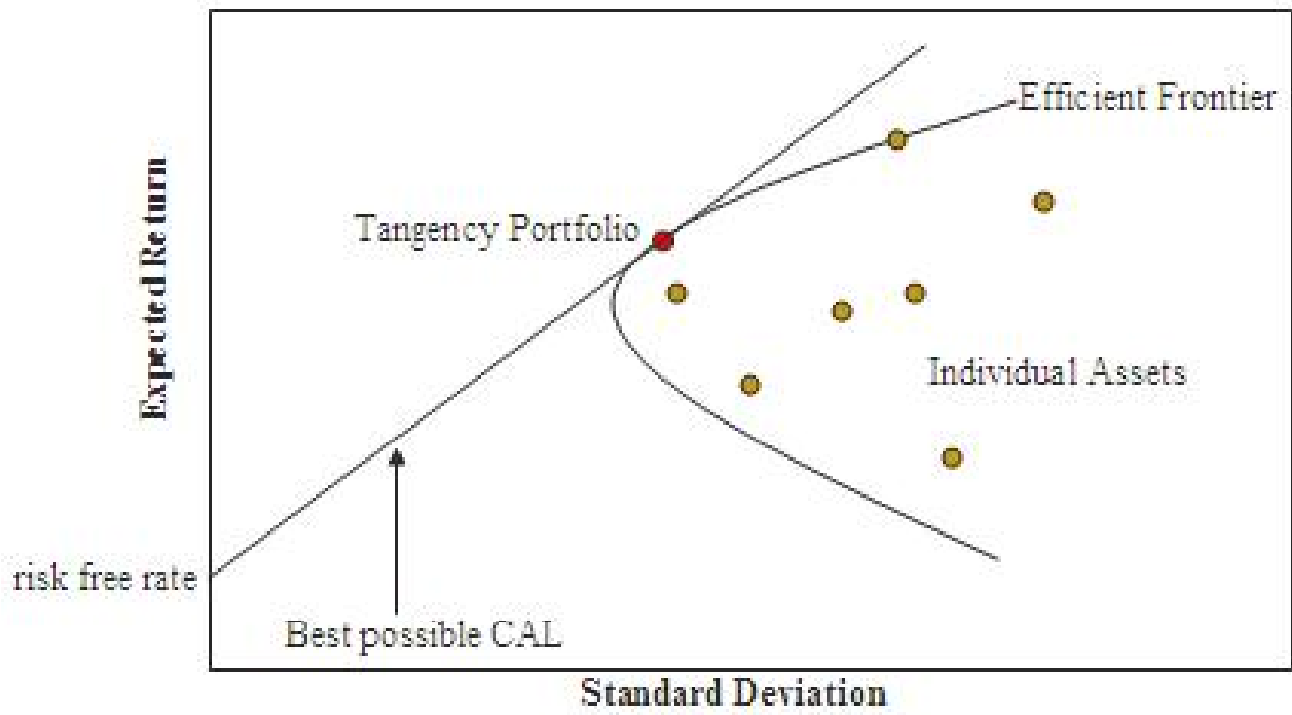
“I suspect that there are some ‘patriotic elements’ related to the state which are encouraged to buy certain stocks because having the Russian equity market open down 3 percent on the announcement of Putin’s presidential candidature was embarrassing”

### RUSSIA GDP GROWTH RATE

Annual GDP Growth Adjusted by Inflation



Source: TradingEconomics.com



=====					
THE S&P 500 UNIVERSE:		SHARE- WEIGHTED % CHG	MKT-CAP WEIGHTED % CHG	NON- WEIGHTED % CHG	
=====					
TOTAL REPORTED Q3/11	33@	GAIN/LOSS:	9.7%	16.5%	17.8%
TOTAL UP EPS	25	AVG. UP:	18.6%	19.4%	25.0%
REVERSALS UP	0^				
TOTAL DOWN EPS	7	AVG. DOWN:	-68.3%	-56.1%	-37.1%
REVERSALS DOWN	1^				
UNCHANGED EPS	1				
TOTAL EX-FINANCIAL:	30	GAIN/LOSS:	7.0%	15.3%	15.6%

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YEAR-OVER-YEAR COMPARISONS\*\*:

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ADJUSTED Q3/11 EARNINGS OF 33/500:		\$24.06#
Q3/10 EARNINGS FOR S&P 500:		\$21.86
PCT. CHANGE OF ADJUSTED EARNINGS TO Q3/10 EARNINGS:		10.06%

=====

YEAR-OVER-YEAR COMPARISONS\*\*:

=====

NET INCOME (AS REPORTED) Q3/11 EARNINGS OF 33/500:		\$23.10#
Q3/10 NET INCOME EARNINGS FOR S&P 500:		\$19.63
PCT. CHANGE OF NET INCOME EARNINGS TO Q3/10 EARNINGS:		17.68%

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DISTRIBUTION OF EARNINGS SURPRISES:

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POSITIVE SURPRISES:	23/33 = 69.7%		
% of Surprises:		EPS Differences (Actual-Estimate):	
(0% to 10%):	15	(1 cent):	7
(10% to 20%):	7	(2 cents):	4
(20% to 30%):	1	(3 to 4 cents):	3
(30% to 40%):	0	(5 to 9 cents):	5
(40% to 50%):	0	(10 to 19 cents):	2
(more than 50%):	0	(20 to 49 cents):	2
% chg NM	0	(50 cents or more):	0

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DISTRIBUTION OF EARNINGS SURPRISES:

=====

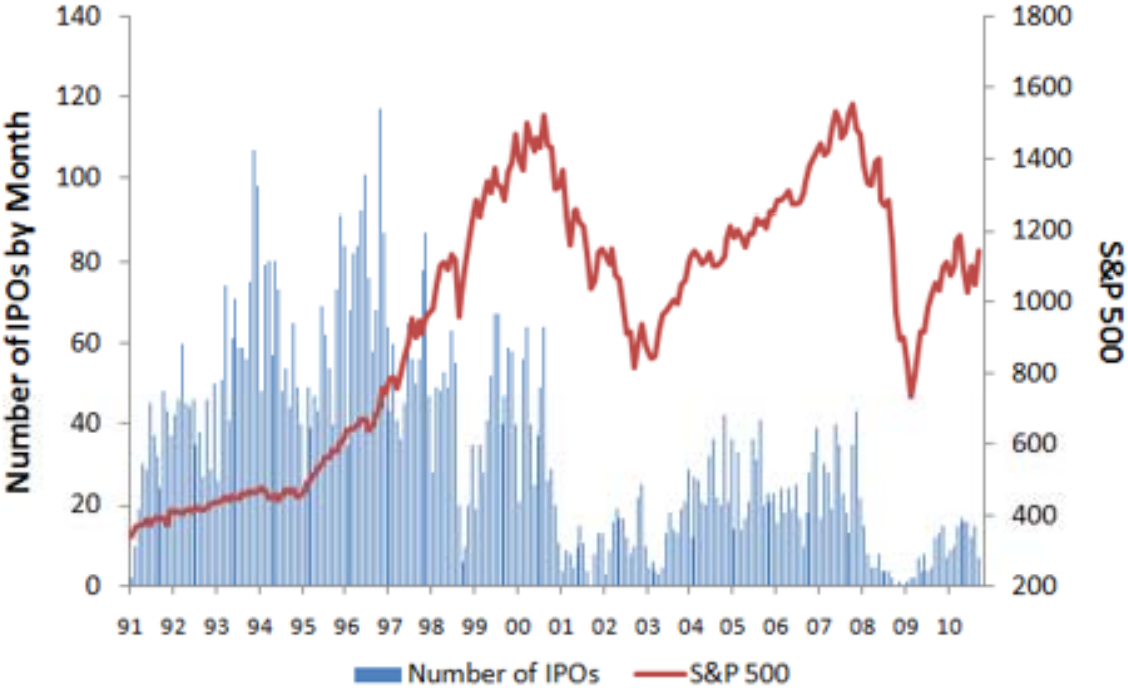


### Fundraising by Venture Funds

Year/Quarter	Number of Funds	Venture Capital (\$M)
2007	233	30,739.7
2008	212	25,814.7
2009	153	16,191.9
2010	162	13,346.3
2011	147	12,249.7
1Q'09	58	4,945.9
2Q'09	39	4,844.2
3Q'09	34	2,332.0
4Q'09	47	4,069.8
1Q'10	45	4,033.8
2Q'10	48	2,098.4
3Q'10	53	3,593.8
4Q'10	45	3,620.3
1Q'11	46	7,634.2
2Q'11	49	2,895.7
3Q'11	52	1,719.7

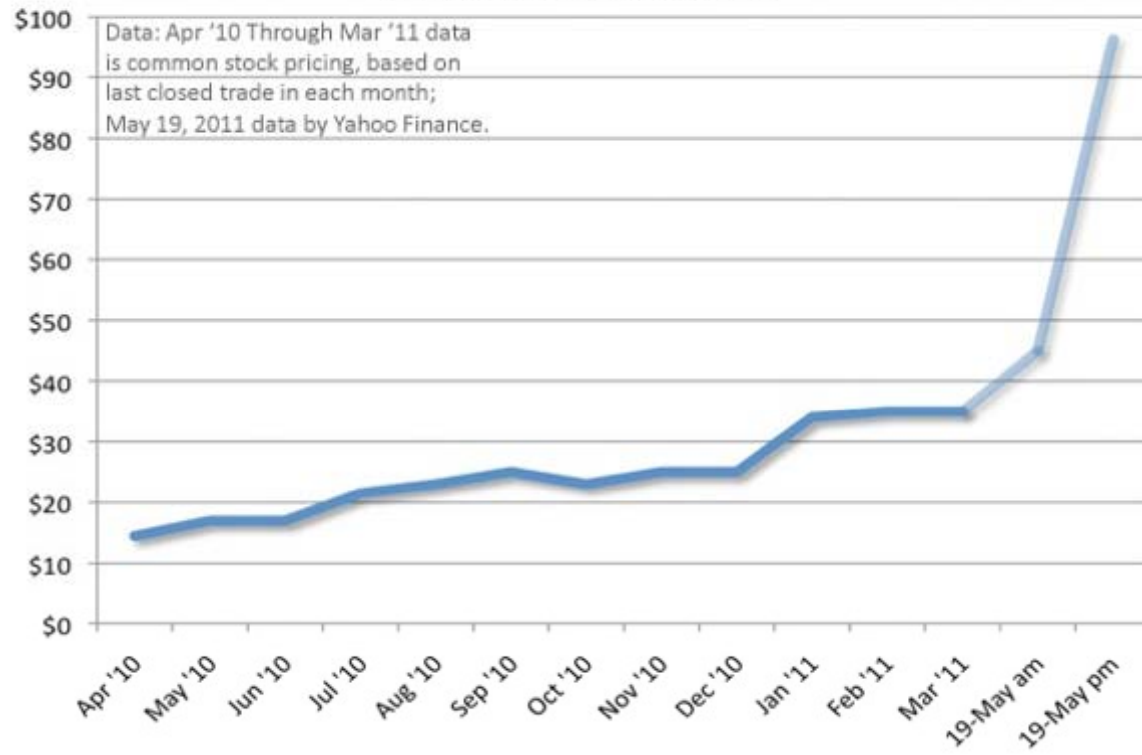
Source: Thomson Reuters and National Venture Capital Association

### Number of US IPOs by Month: 1991-Present





### LinkedIn Stock Price



# Financing Start-ups

## Non-Equity

**Self Finance /  
Bootstrapping**

**Debt /  
Bank Finance**

## Equity

**Angel Financing**

**Venture Capital**

**Private Equity**

**Public  
Stock Markets**

# Problem

- We are in danger of drying out of financial resources in RF
- Limited money available from capital markets
- Public money rather risky
- Potential to loose ground in R&D

# A possible solution

Innovation Bond

Long term  
Seen as risky investment vehicle  
Active management from reserve bank

Managed like VC

Profit-based  
Free of government visions

# The importance of managing currency risk

		Estimates	Std Error	t	Approx Sig
Regression Coefficients	USDMEX	.540	.192	2.817	.006
	USDRRU	.193	.046	4.231	.000
	USDZAR	.273	0.060	4.520	.000

## Future of research...

- Understanding the principles of VC and make them transferrable into the public sphere
- Make the set-up trustworthy and tangible for investors
- Understanding how private capital markets work
- Studying the role of foresight in this process