Some empirical observations on a sample of Icelandic employees

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Plan of talk

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6. IDA and LINDA are huge projects that require a lot of labour
7. In Iceland we are just beginning. After doctoral studies I worked with firm-individual based data (Kjararannsóknarnefnd). Organizing data of such type is a big project.

Aggregation can be misleading

	High wages	Low wages
Males	18	12
Females	7	3

Table: Firm A. 70% of females high pay, 60% of males high pay.

	High wages	Low wages
Males	2	8
Females	9	21

Table: Firm B. 30% of females high pay, 20% of males high pay.

	High wages	Low wages
Males	20	20
Females	16	24

Table: Firm A+B. 40% of females high pay, 50% of males high pay.

The omitted variable bias, avoid 2x2 tables

	job=1	job=2
Males	154.000	241.429
Females	126.667	200.000

Table: Average pay by job-category and gender

	age-group=1	age-group=2
Males	145.000	235.000
Females	122.500	190.000

Table: Average pay by age-category and gender

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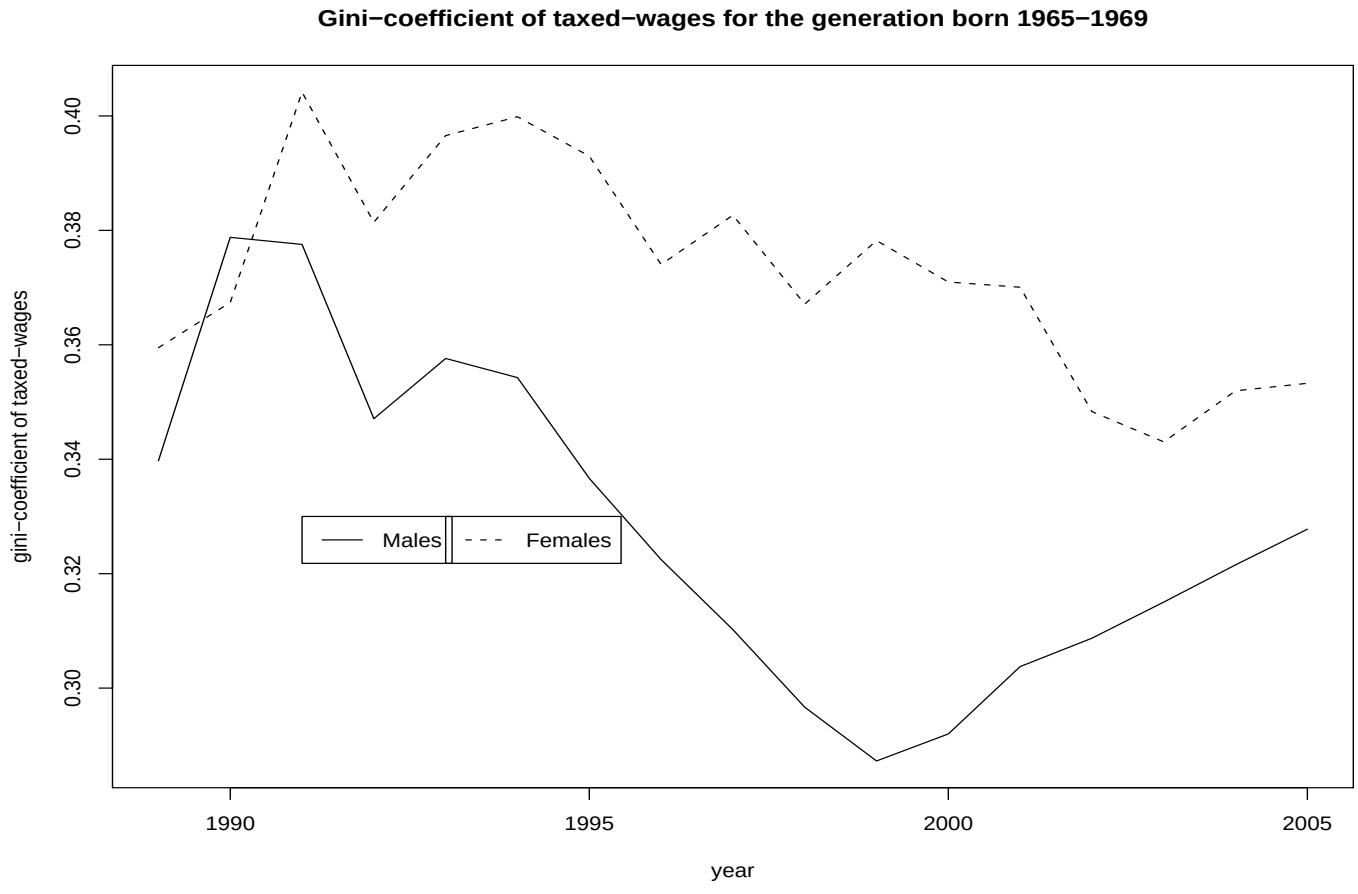
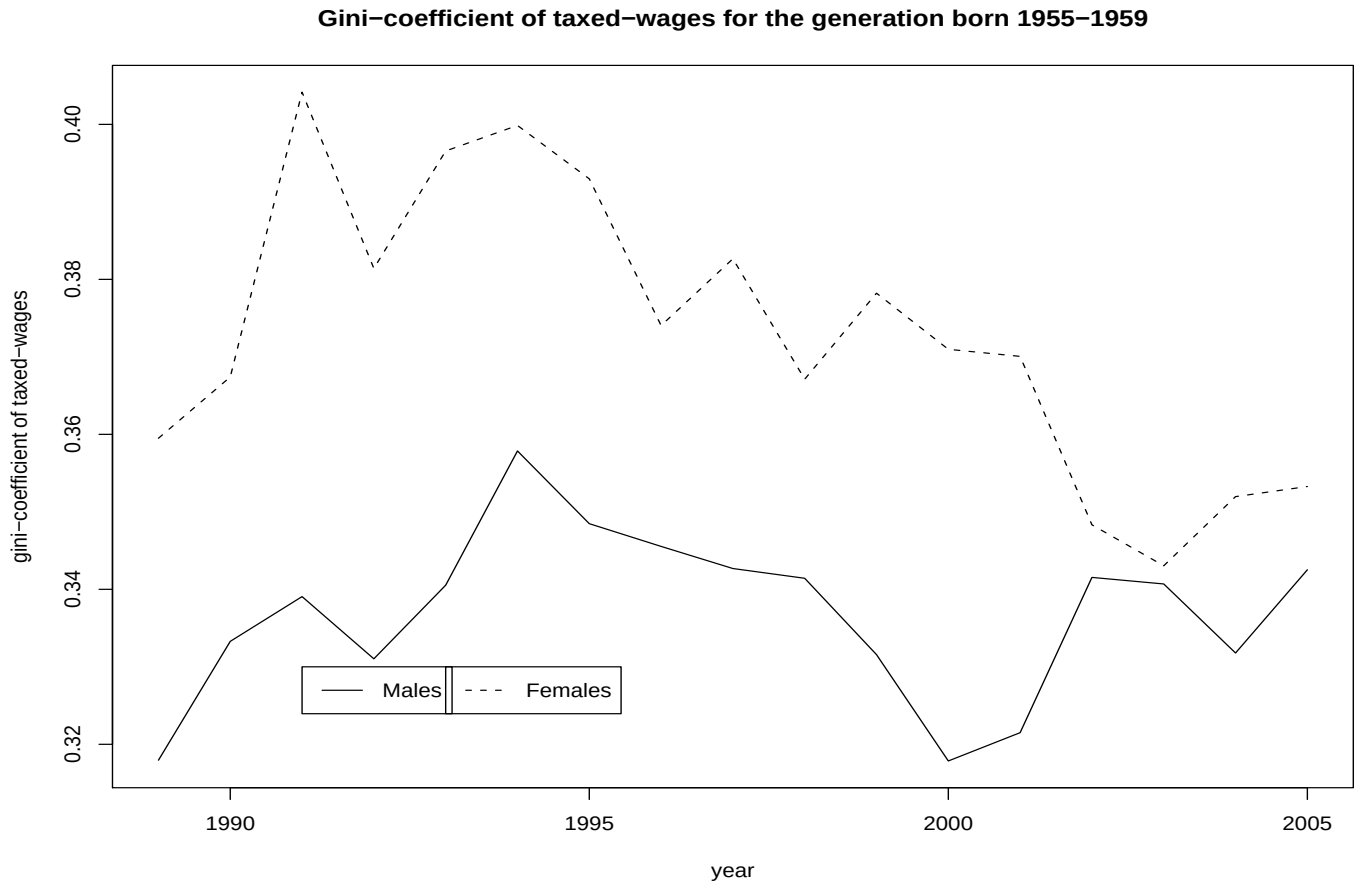
- A sample of individuals with taxed wages in the period 1989-2005.
- Everyone who married into to sample was also included
- Data consists of 13.671 individuals on a yearly basis.


Gini−coefficient of taxed−wages for the generation born 1965−1969
gini−coefficient of taxed−wages
0.30
0.32
0.34
0.36
0.38
0.40
1990
1995
2000
2005
year
Males
Females


Gini−coefficient of taxed−wages for the generation born 1955−1959
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0.32
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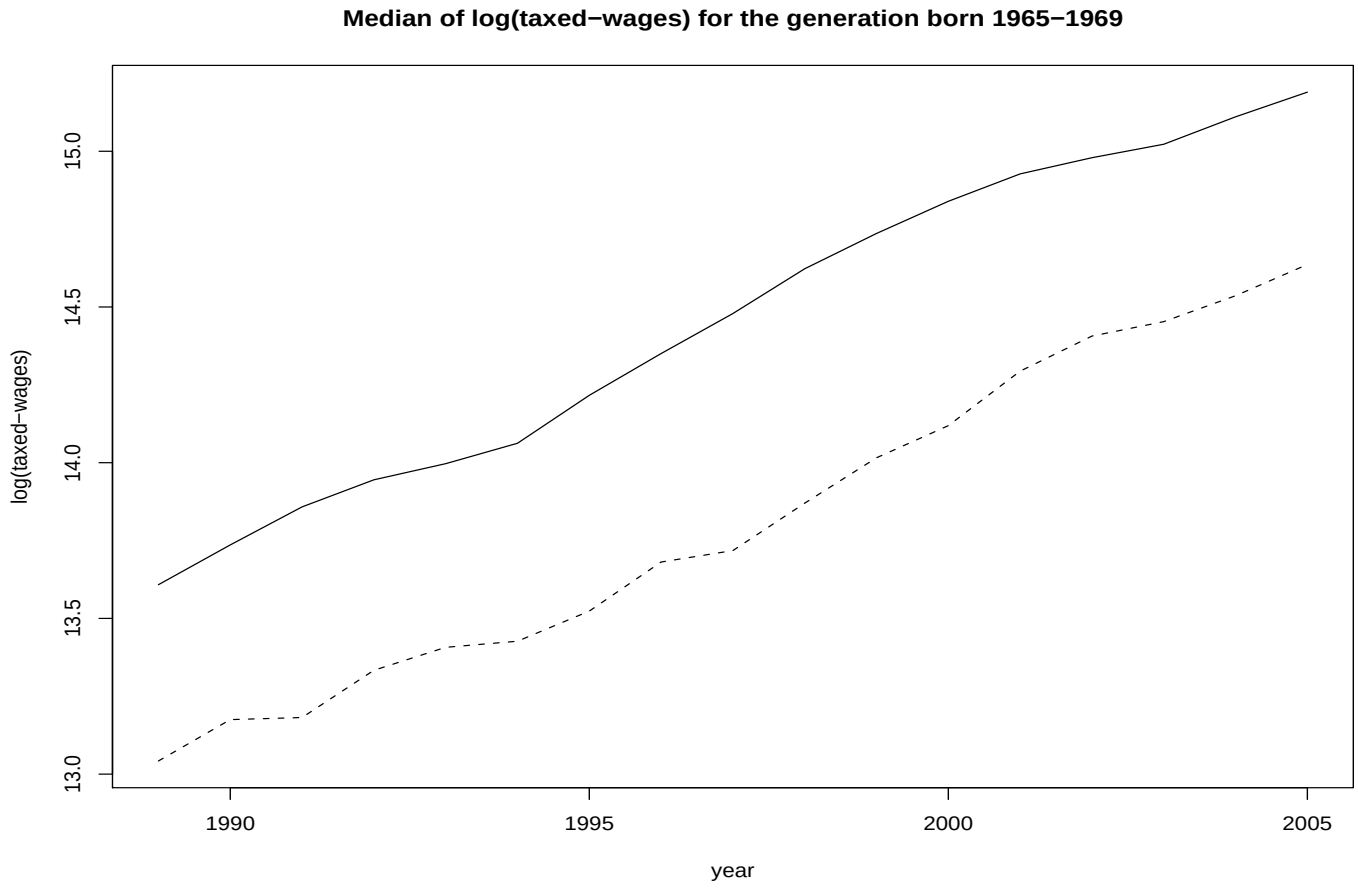
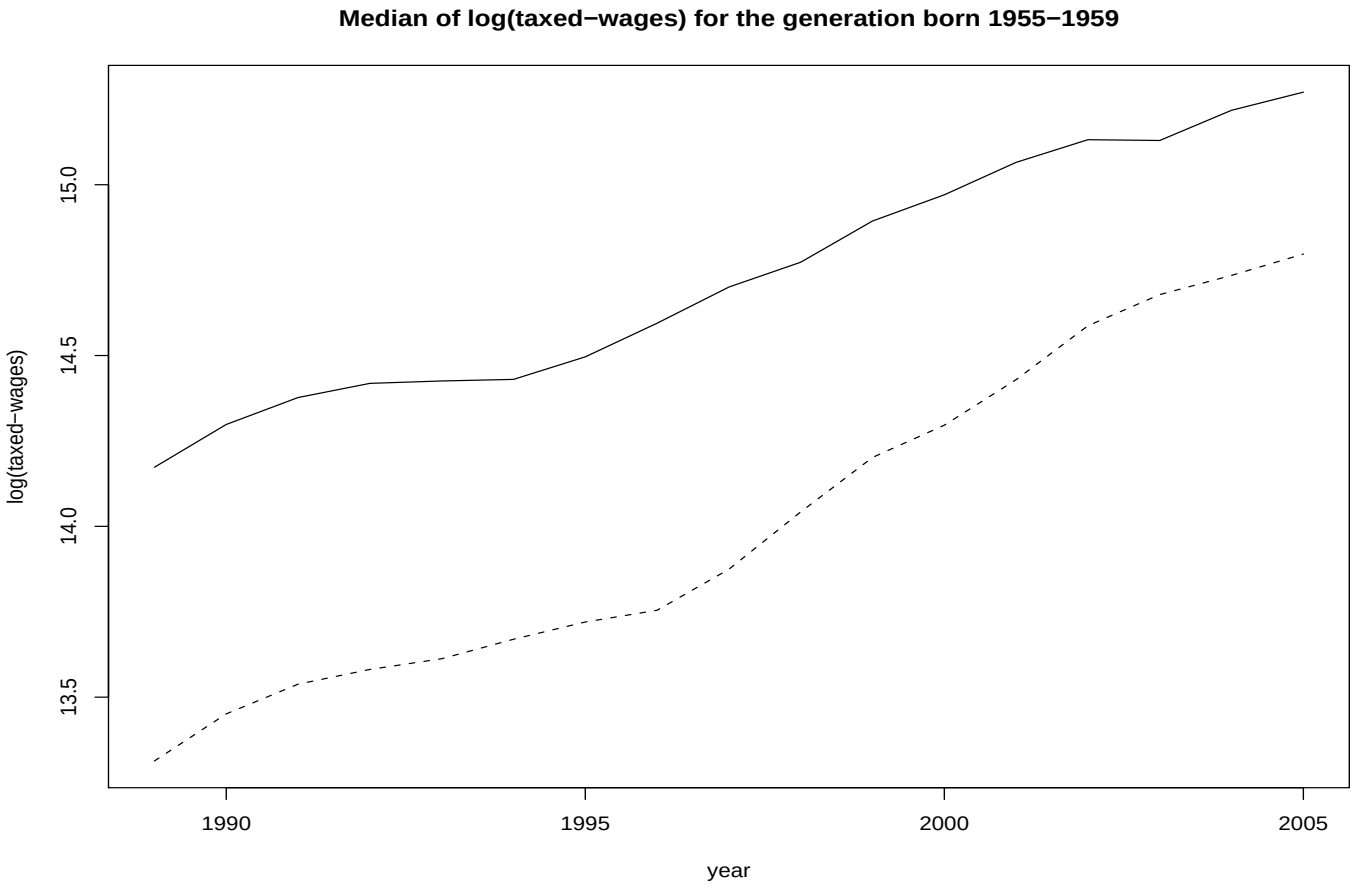
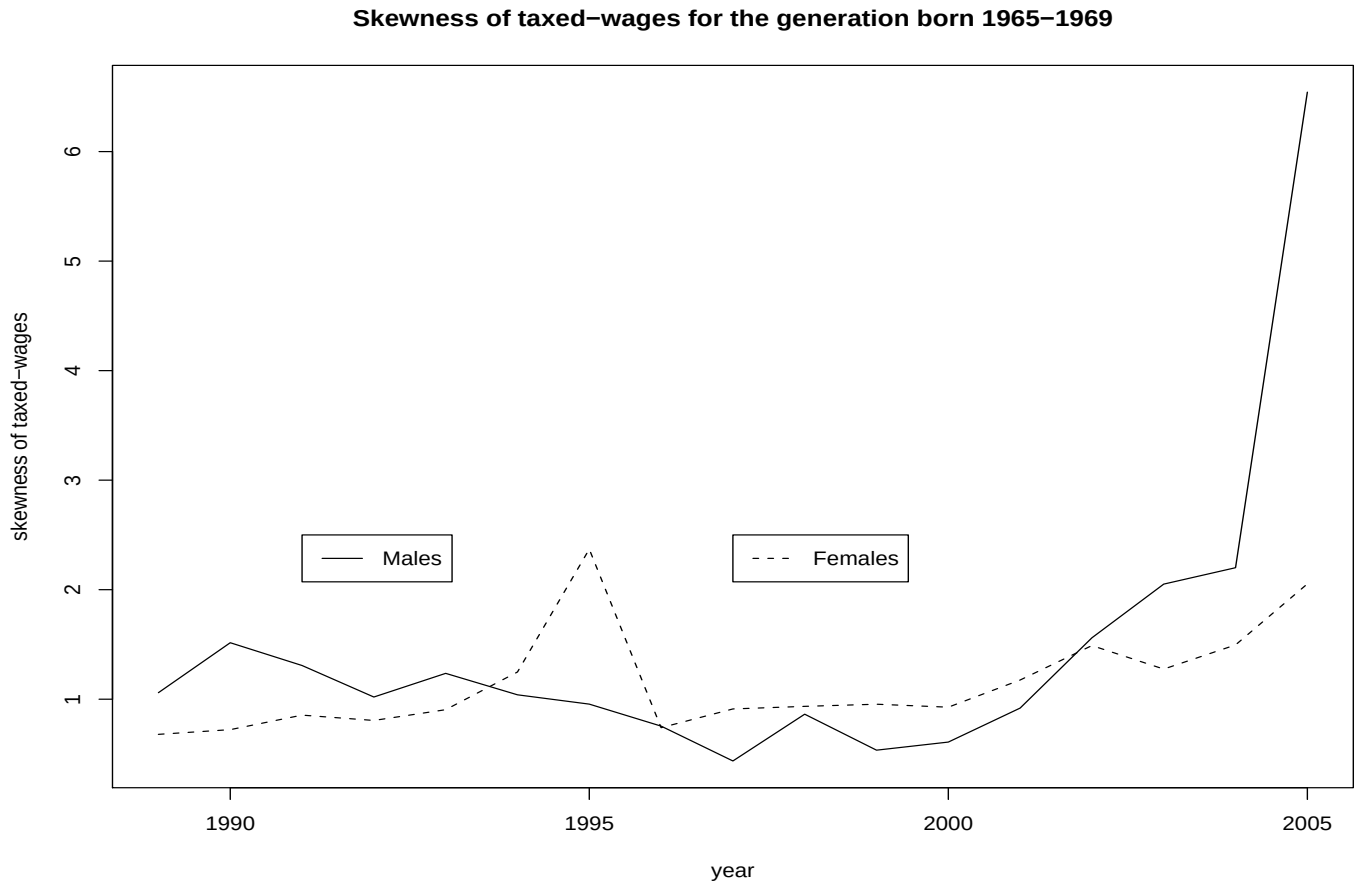

Median of log(taxed−wages) for the generation born 1965−1969
log(taxed−wages)
13.0
13.5
14.0
14.5
15.0
1990
1995
2000
2005
year


Median of log(taxed−wages) for the generation born 1955−1959
log(taxed−wages)
13.5
14.0
14.5
15.0
1990
1995
2000
2005
year


Skewness of taxed−wages for the generation born 1965−1969
skewness of taxed−wages
1
2
3
4
5
6
1990
1995
2000
2005
year
Males
Females

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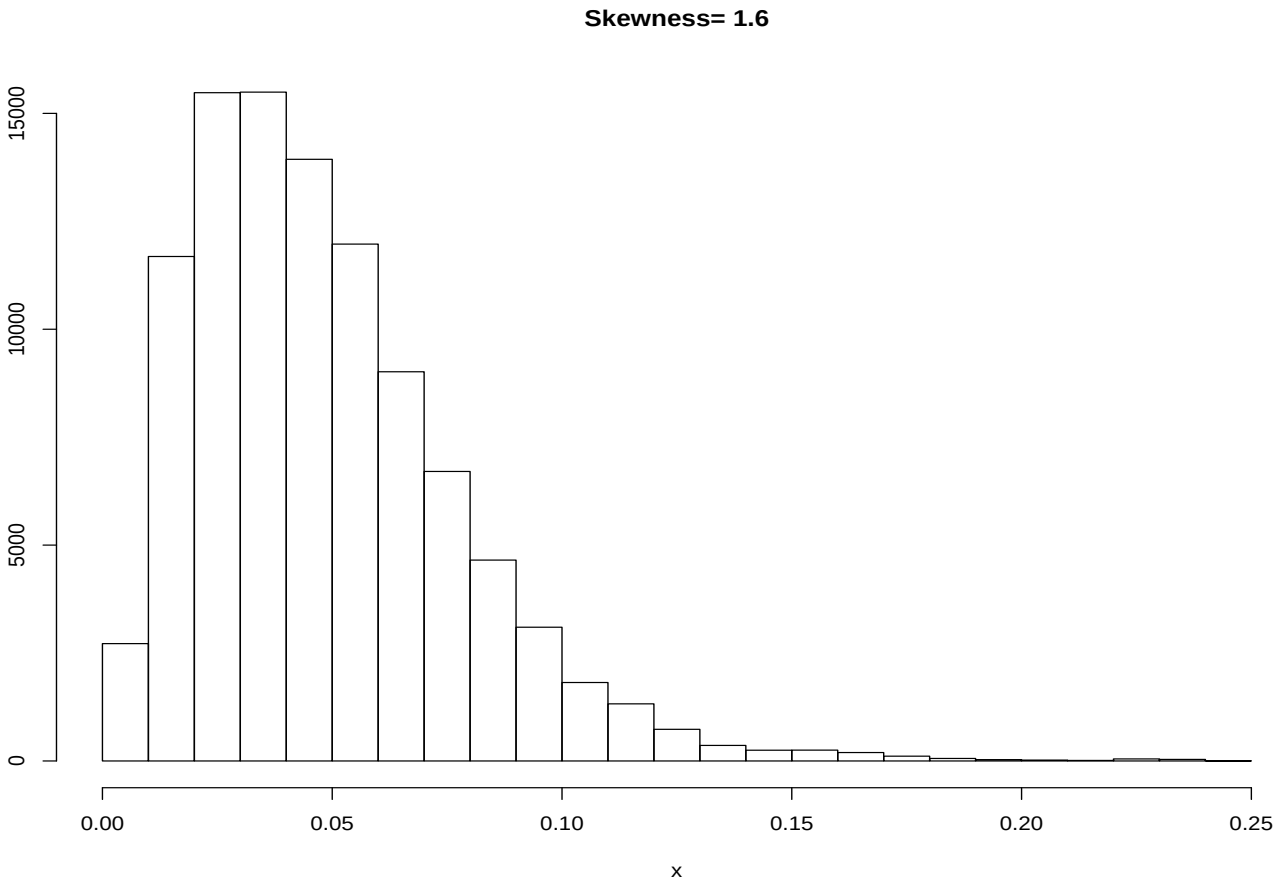
- Some very simple SDE can generate quite wild patterns.
- Sometimes an equilibrium distribution can be derived.


Skewness= 1.6
15000
10000
5000
0
0.00
0.05
0.10
0.15
0.20
0.25
x

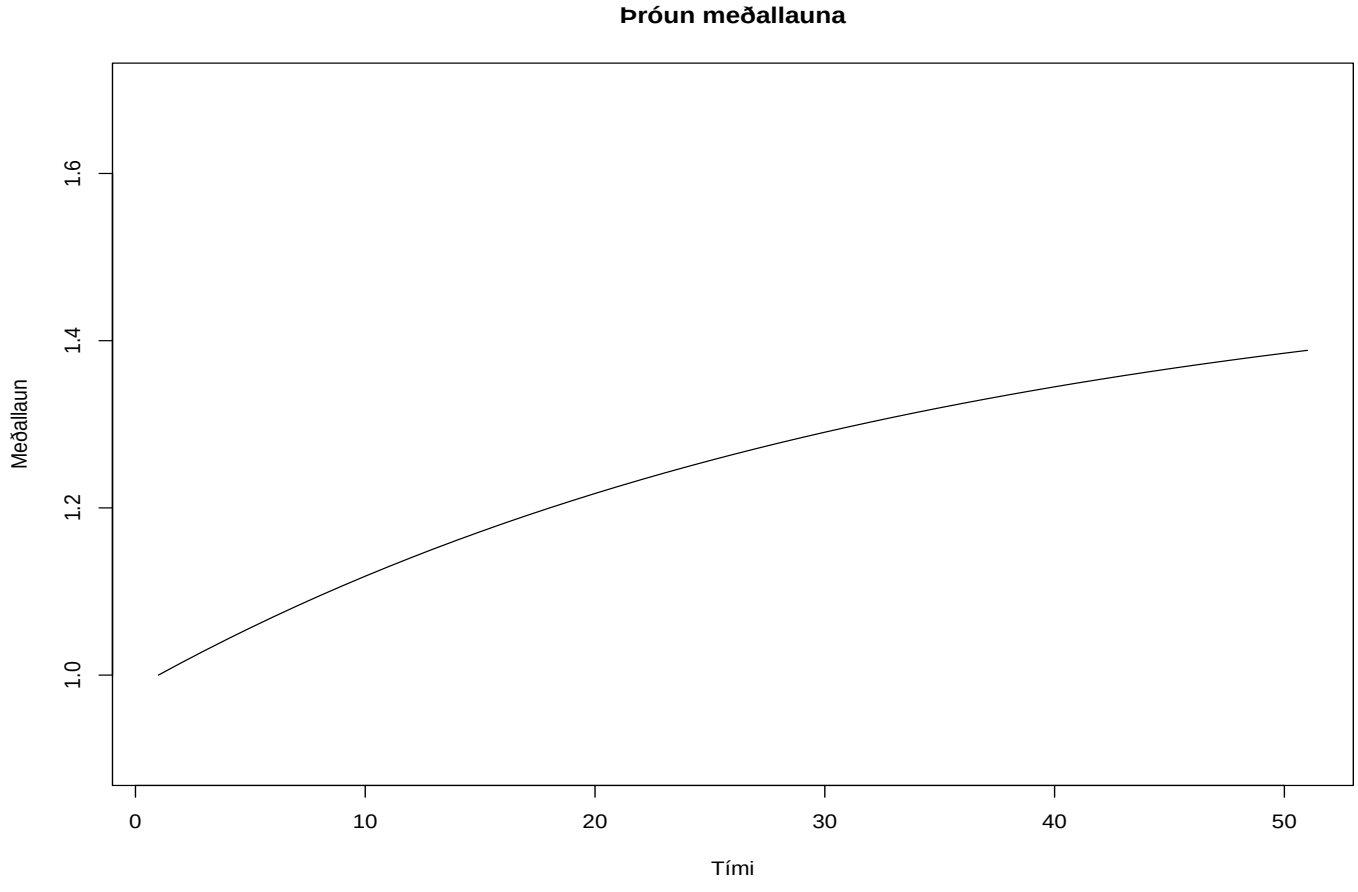


Figure: The expected average of $L(t) = 1 + X(t)$ where $dX = \kappa(\alpha - X)dt + \sigma X dW$.
$\kappa = 0.03$, $\alpha = 0.5$, $\sigma = 0.3$

This is actually a very wild process

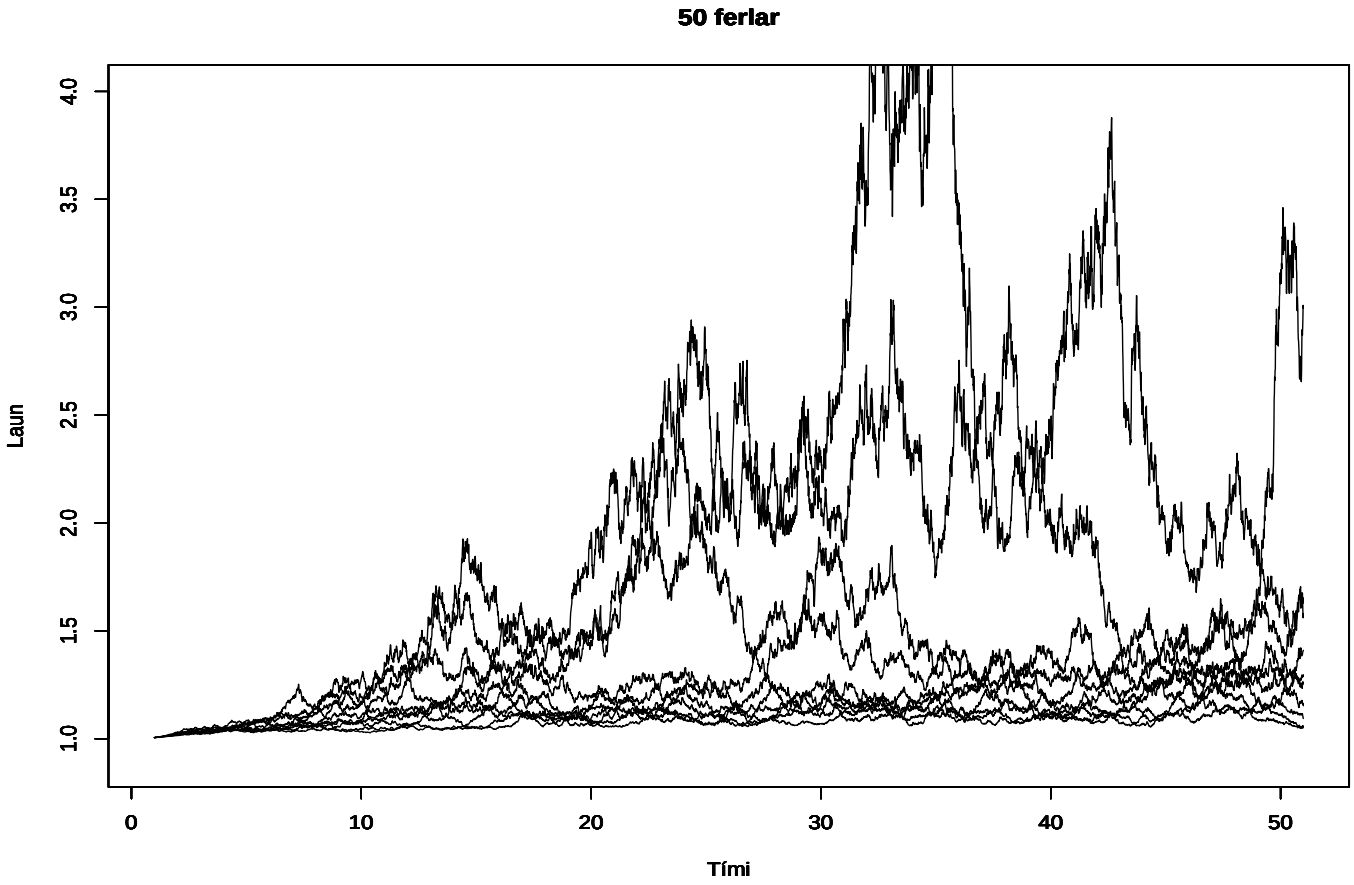


Figure: 50 simulated paths of $L(t) = 1 + X(t)$ where $dX = \kappa(\alpha - X)dt + \sigma X dW$.
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- We hope to see you soon again in Iceland.