



Δημοκρίτειο Πανεπιστήμιο Θράκης
Τμήμα Οικονομικών Επιστημών

Η προσέγγιση της Οικονομετρίας στη διαδικασία λήψης αποφάσεων

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Λέκτορας (Π.Δ. 407/80)

Κομοτηνή, 21 Φεβρουαρίου 2018

Καθημερινές αποφάσεις

- Μέσος άνθρωπος: 35.000 κάθε μέρα → 70
- Διευθύνων σύμβουλος: 139 την εβδομάδα
 - 50% εννιά λεπτά ή λιγότερο
 - 12% μία ώρα ή περισσότερο

(Iyengar, 2010)

Οικονομετρία

Η οικονομετρία κάνει τέσσερα πράγματα:

α) περιγράφει τα δεδομένα,

β) κάνει προβλέψεις,

γ) ποσοτικοποιεί αυτά που ξέρουμε και δεν ξέρουμε για την πραγματική δομή της οικονομίας και

δ) συμβουλεύει αυτούς που χαράσσουν την οικονομική πολιτική.

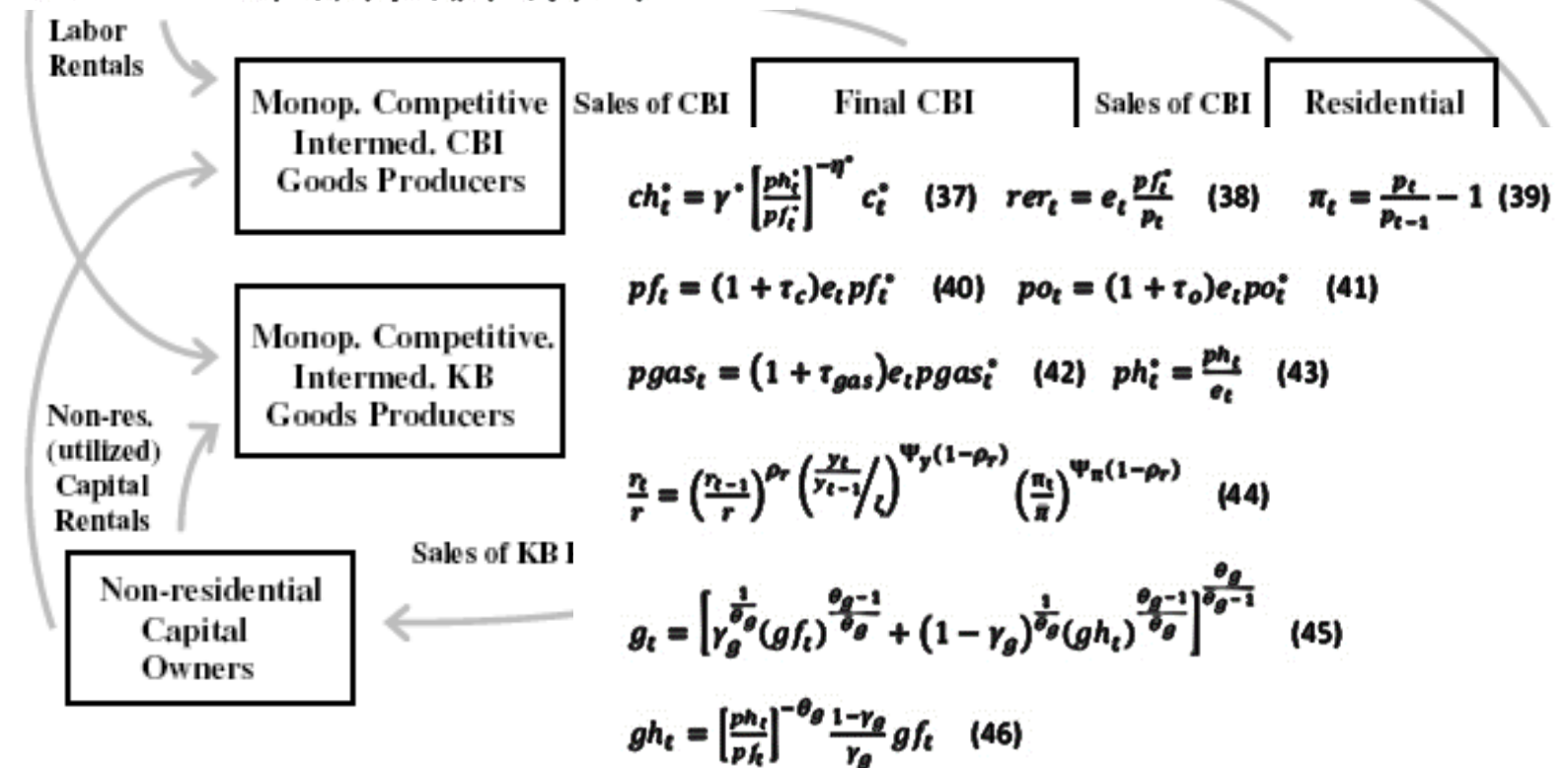
(Stock και Watson, 2001)

$$(15) \quad \hat{c}_t = \Phi_c \hat{c}_{t-1} + (1 - \Phi_c) E_t \hat{c}_{t+1} - \frac{1}{\gamma} E_t [\hat{R}_t - \hat{\pi}_{t+1}] - E_t \hat{\theta}_{t+1}$$

$$(16) \quad \hat{\pi}_t = \Phi_\pi \hat{\pi}_{t-1} + (1 - \Phi_\pi) \beta E_t \hat{\pi}_{t+1} + s_c \hat{c}_t + s_T \hat{T}_t - s_z \hat{z}_t$$

$$(17) \quad \hat{T}_t = \beta \tau_1 E_t \hat{T}_{t+1} + \tau_1 \hat{T}_{t-1} - \tau_c \hat{c}_t + \tau_z \hat{z}_t + \tau_f \hat{f}_t$$

$$(18) \quad \hat{R}_t = \rho_r \hat{R}_{t-1} + \rho_\pi \hat{\pi}_t + \rho_c \hat{c}_t + \hat{E}_t'$$



THE SPHERES OF BIG DATA ARE CONVERGING

30



billion pieces
of data
are added to
Facebook
each month

72

hours of
video are
added to
YouTube
each minute



\$600

buys you a disk
that stores
all music
on Earth



92%

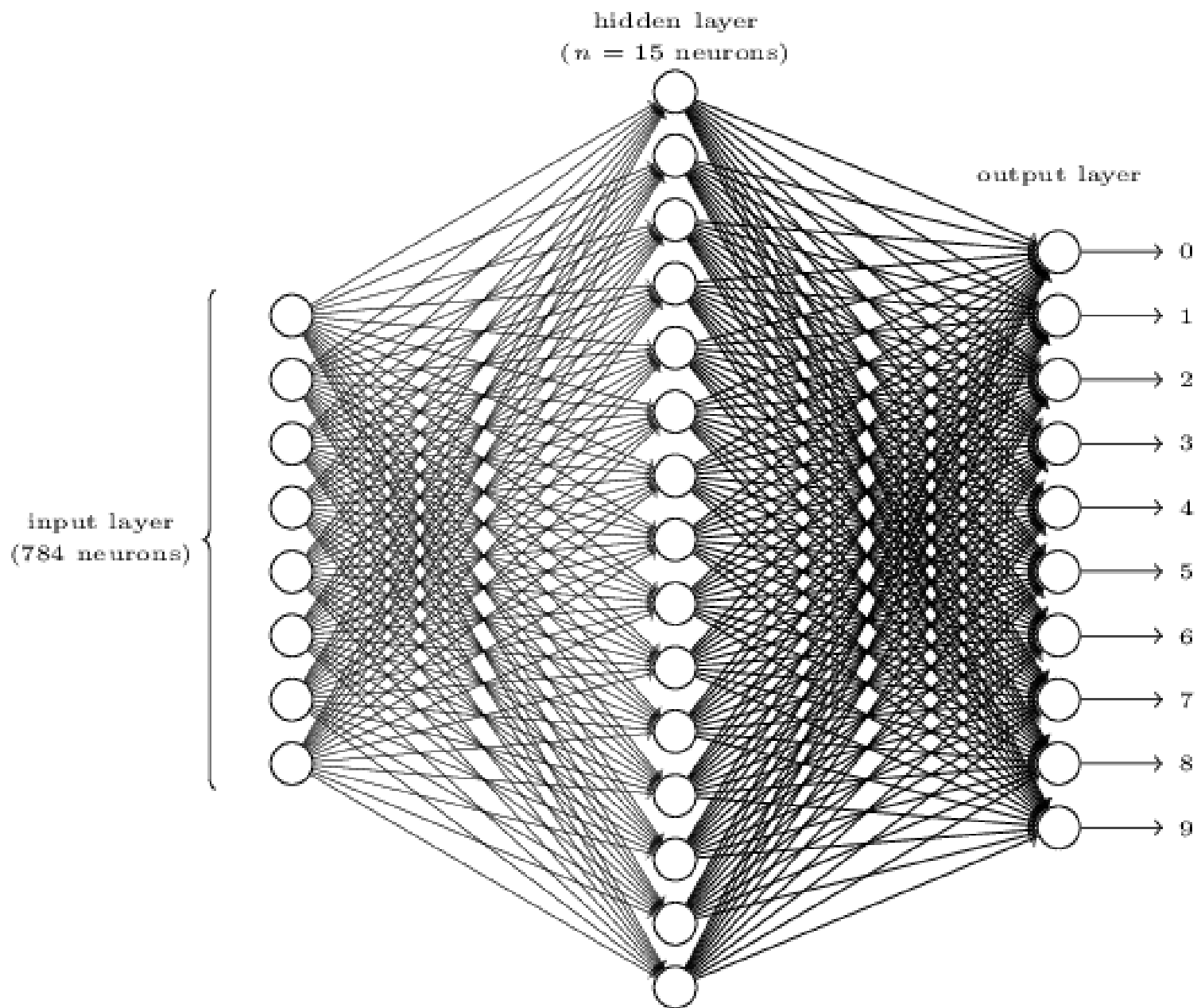


of the world's
data was created
in the past 2 years

DATA AGGREGATED BY GONGOS RESEARCH

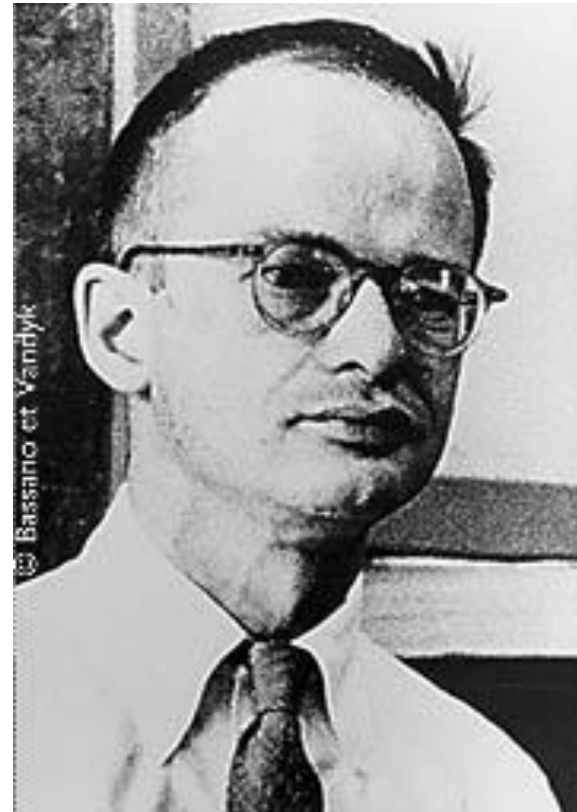




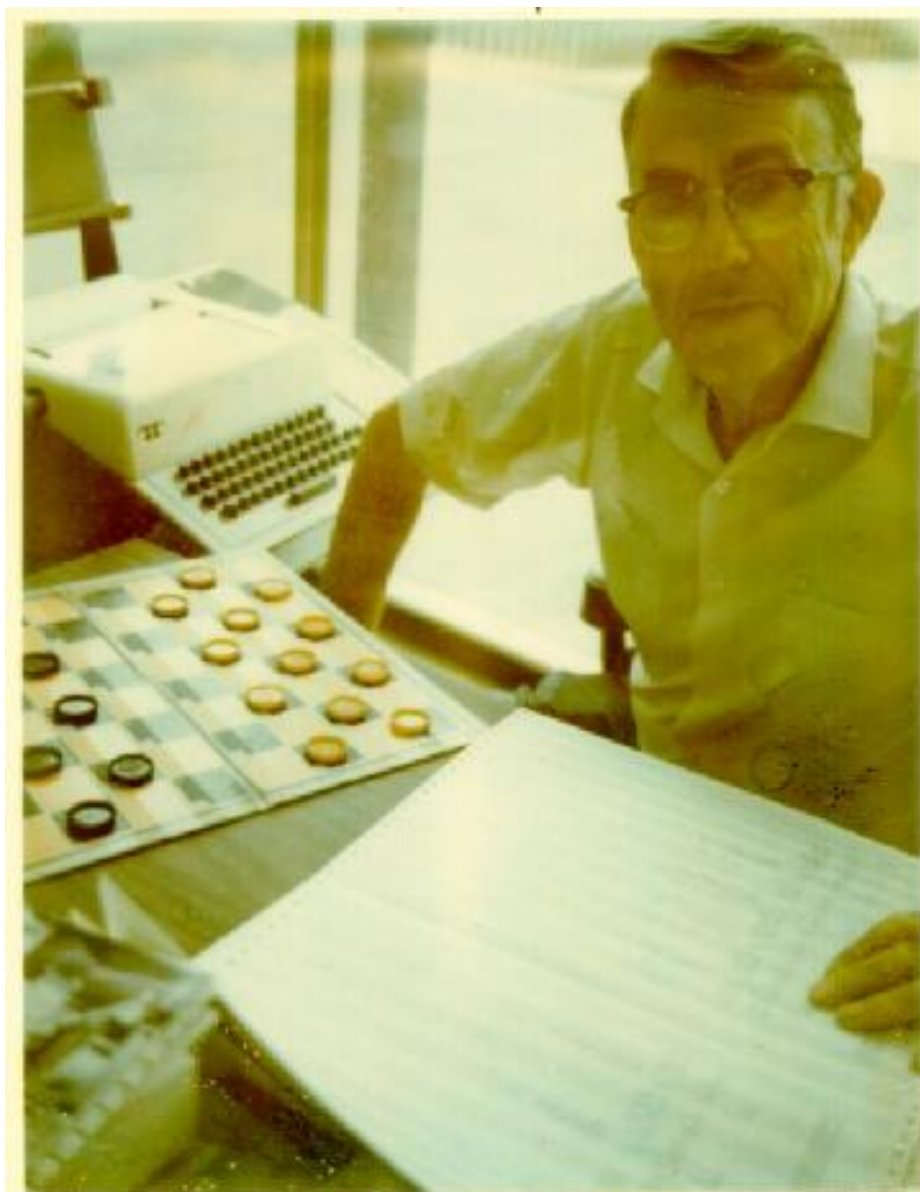




Warren McCulloch



Walter Pitts



Arthur Samuel

perceptron

In 1958 Frank Rosenblatt built a prototype neural net, which he called the Perceptron



Source: <http://www.enzyklopaedie-der-wirtschaftsinformatik.de/wi-enzyklopaedie/Members/wilex4/Rosen-2.jpg>





amazon



Google



STANFORD
UNIVERSITY



Capital Asset Pricing Theory



Harry Markowitz (1952) [1990]



William Sharpe (1964) [1990]

Capital Asset Pricing Theory



John Lintner (1965)



Jan Mossin (1966)

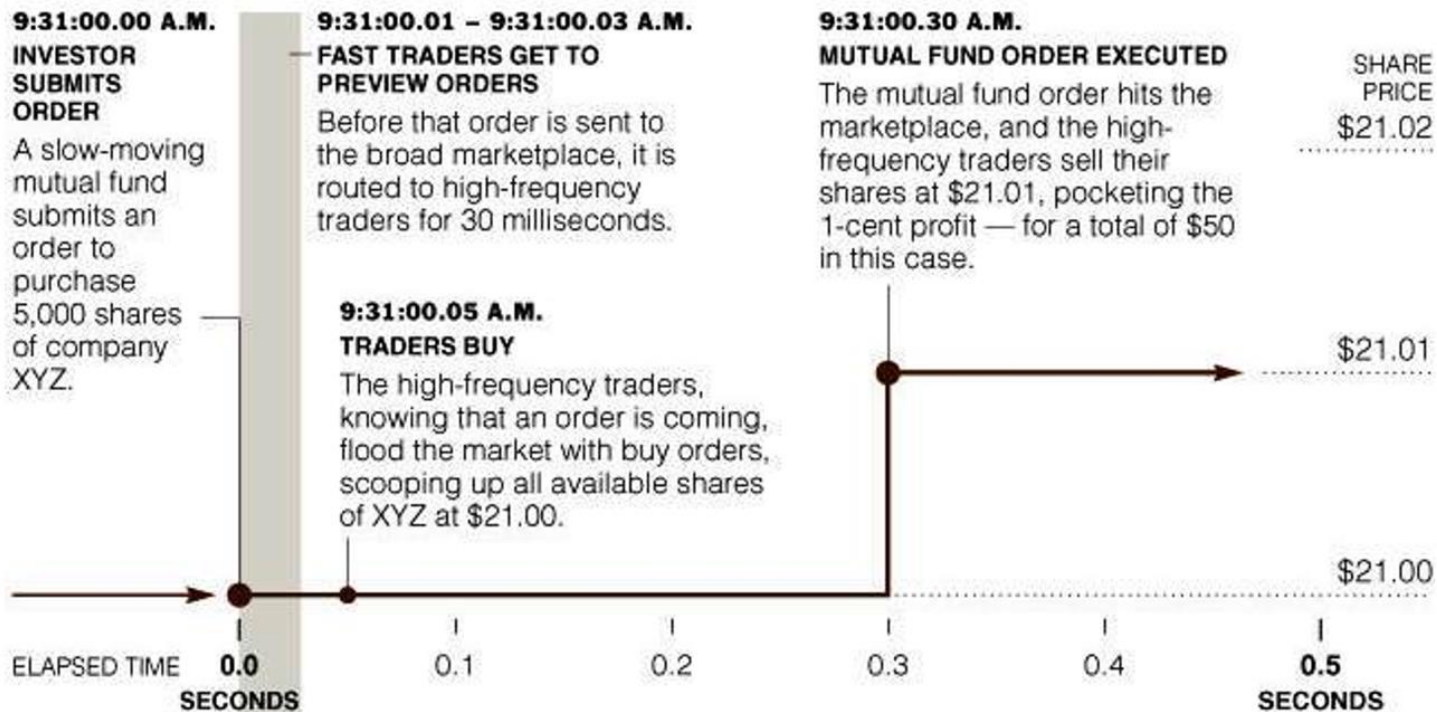
Arbitrage Pricing Theory

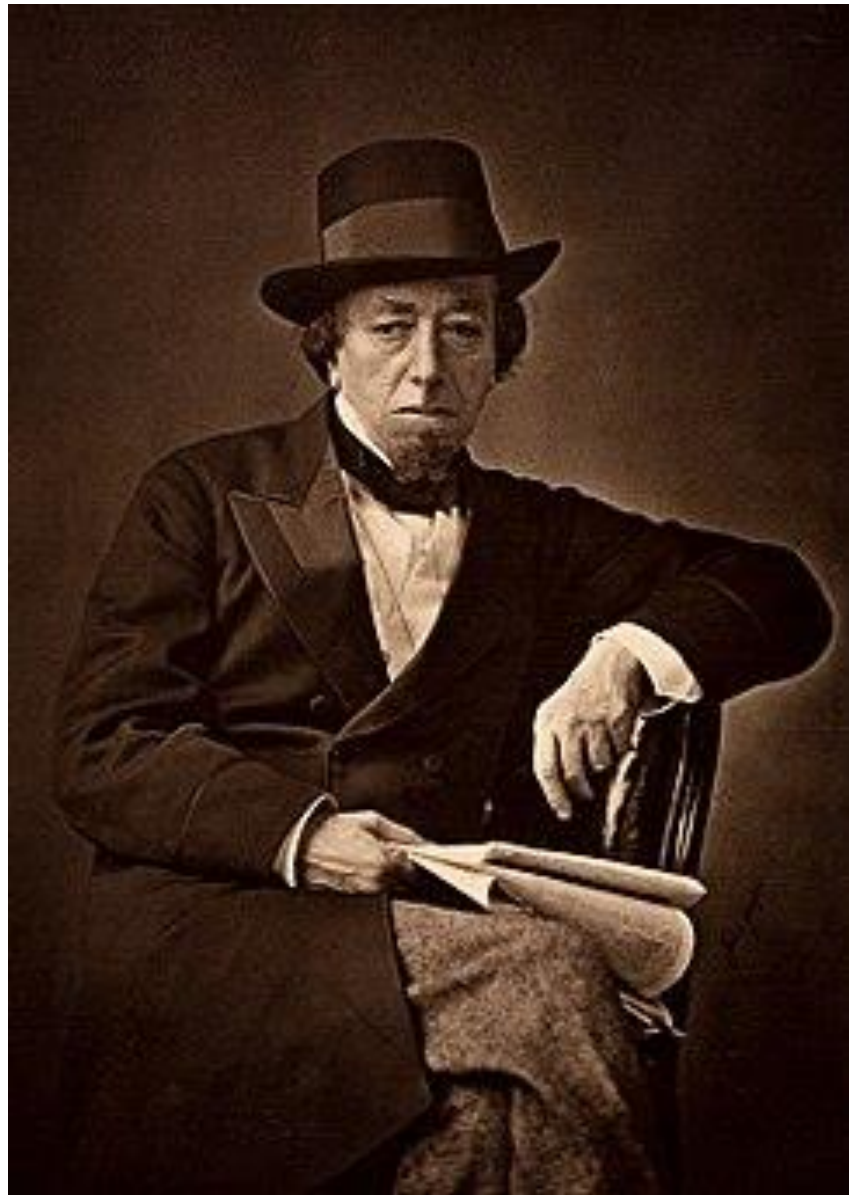


Stephen Ross (1976)



High Frequency Trading



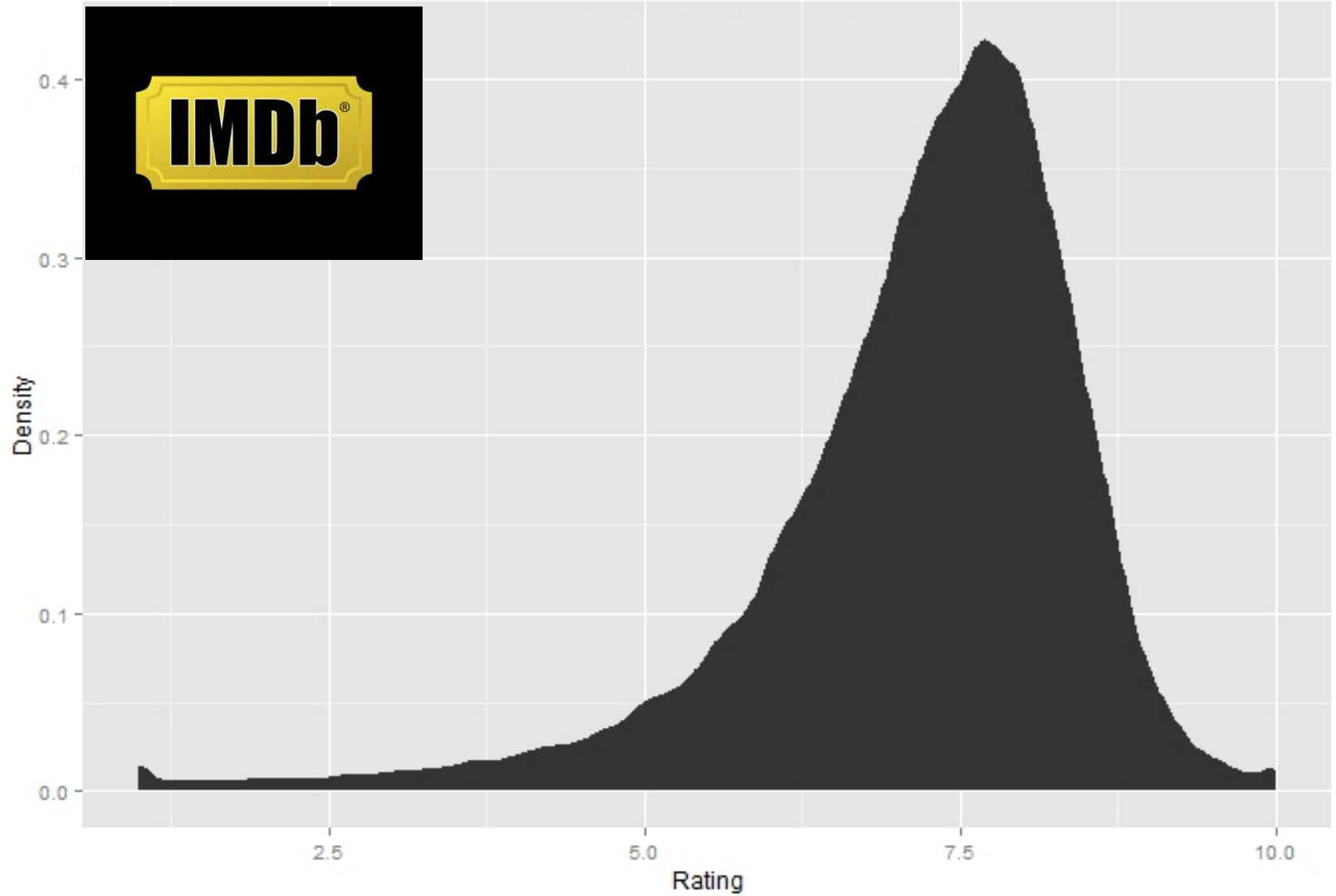


Benjamin Disraeli



Roy Price

Distribution of ratings







Ted Sarantos

A NETFLIX ORIGINAL SERIES

HOUSE *of* CARDS





[Google.org home](#)

[Dengue Trends](#)

Flu Trends

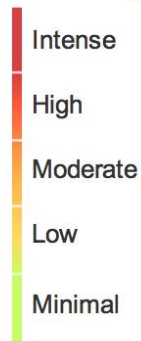
Home

Select country/region ▾

[How does this work?](#)

[FAQ](#)

Flu activity



Explore

We've found
to estimate fl



es aggregated Google search data





Emanuel and Mayer Lehman

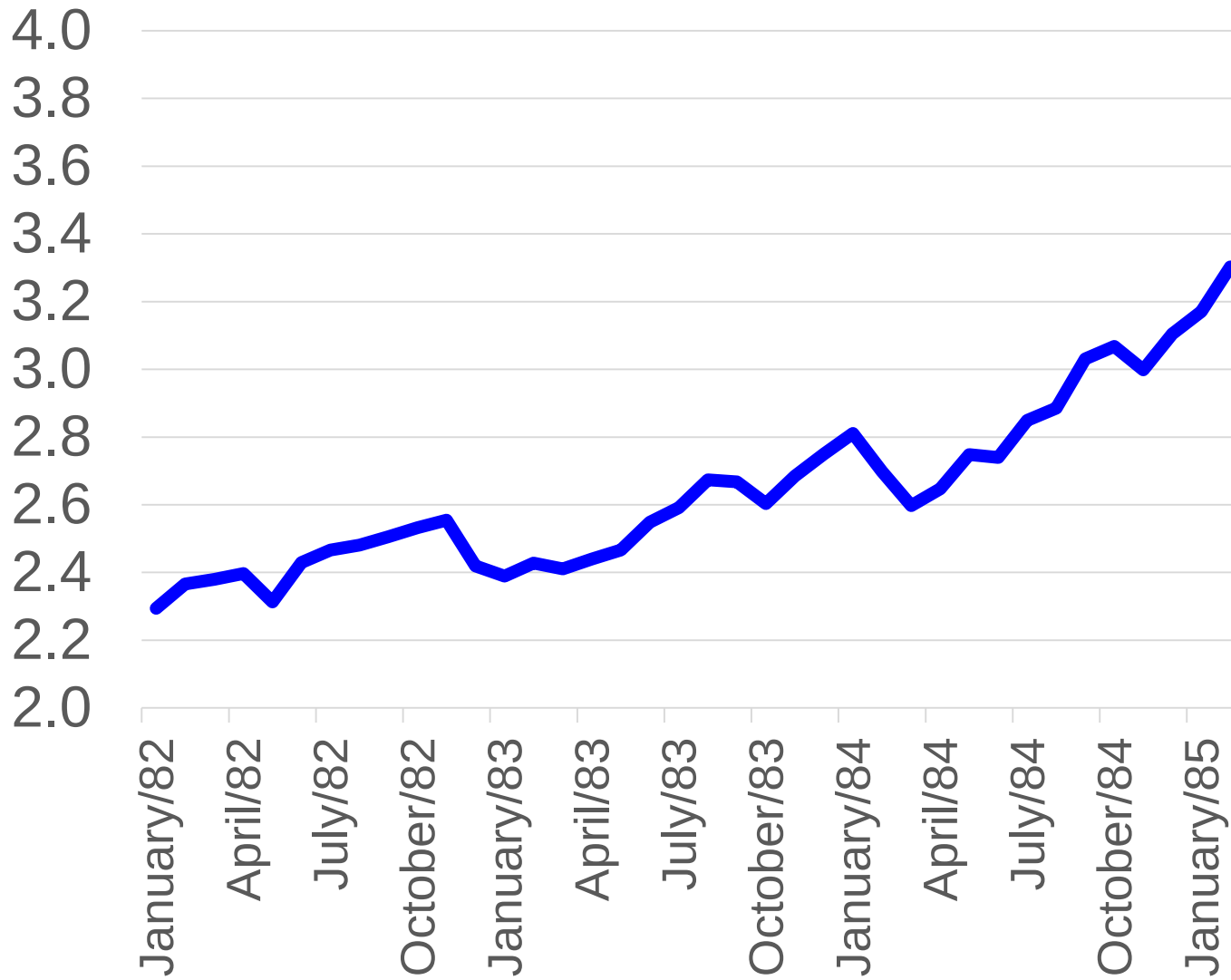




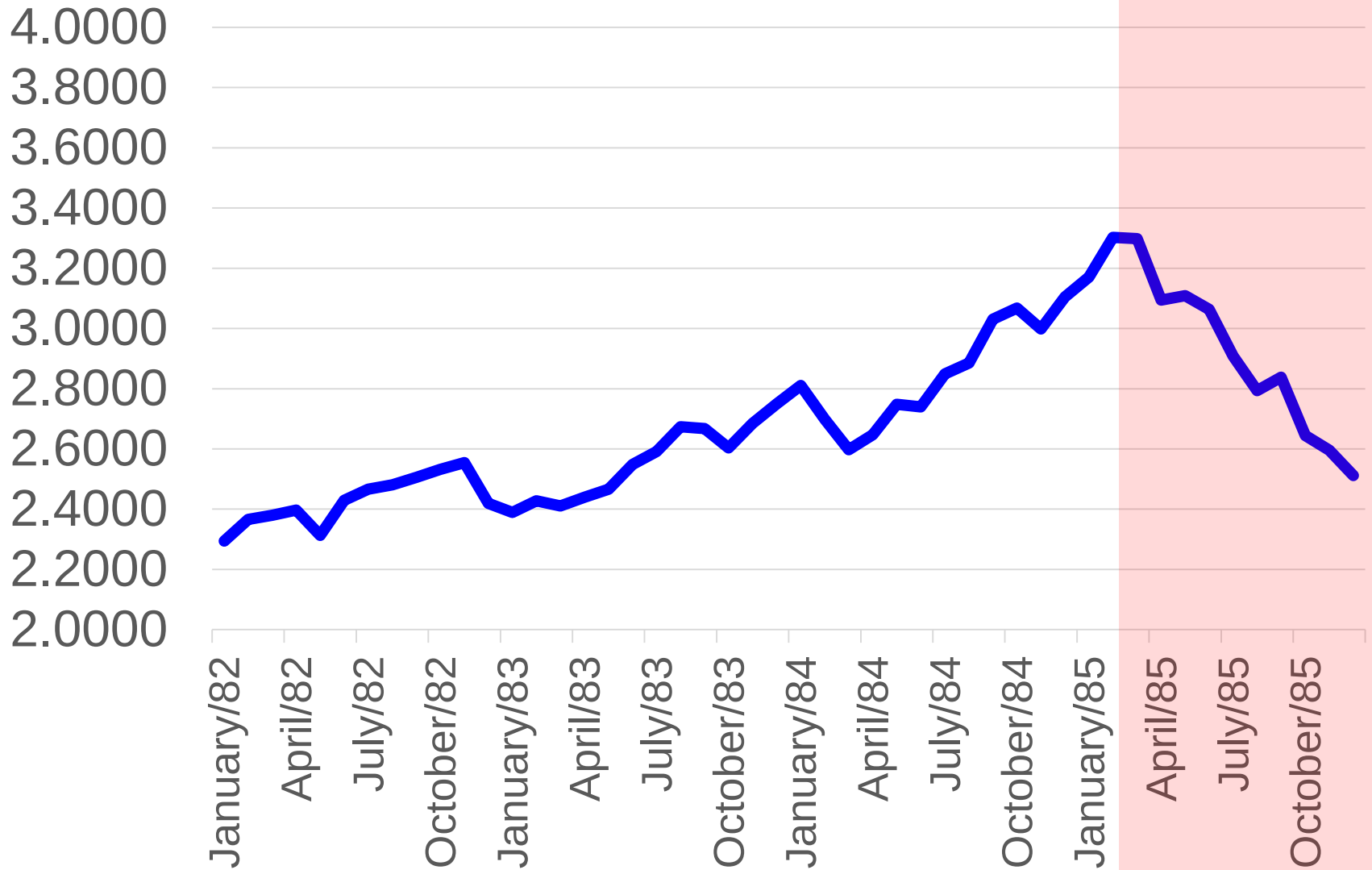
- Ιανουάριος 1985 DM/\$ 3.2
- Lufthansa αγοράζει 20 Boeing 737 Jets για \$500 mil. πληρωτέα τον Ιανουάριο 1986 με την παράδοση



USD/ DM



USD/ DM



14 Φεβρουαρίου 1986 - Απόλυση



**LONDON
INFRASTRUCTURE
PLAN 2050
A CONSULTATION**

HM Treasury



MAYOR OF LONDON

LONDON ASSEMBLY



OXFORD
ECONOMICS

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Greater London
Authority
- Intelligence Unit





Open Data for All New Yorkers

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Search Open Data for things like 311, Buildings, Crime



How You Can Get Involved



New to Open Data



Data Veterans



Get in Touch



Dive into the Data

Translate »

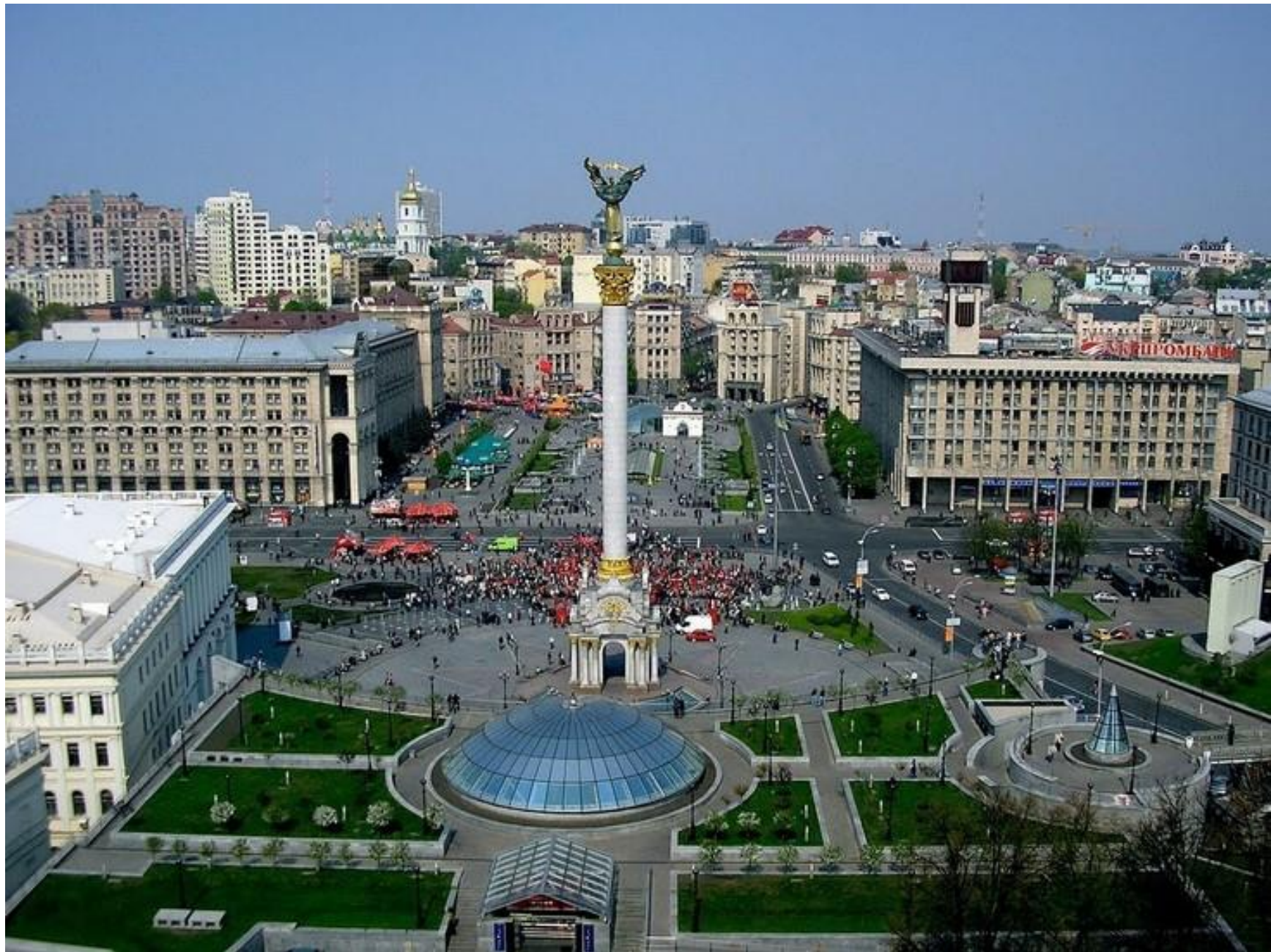


Fig. 1. Strategic development goals until 2025

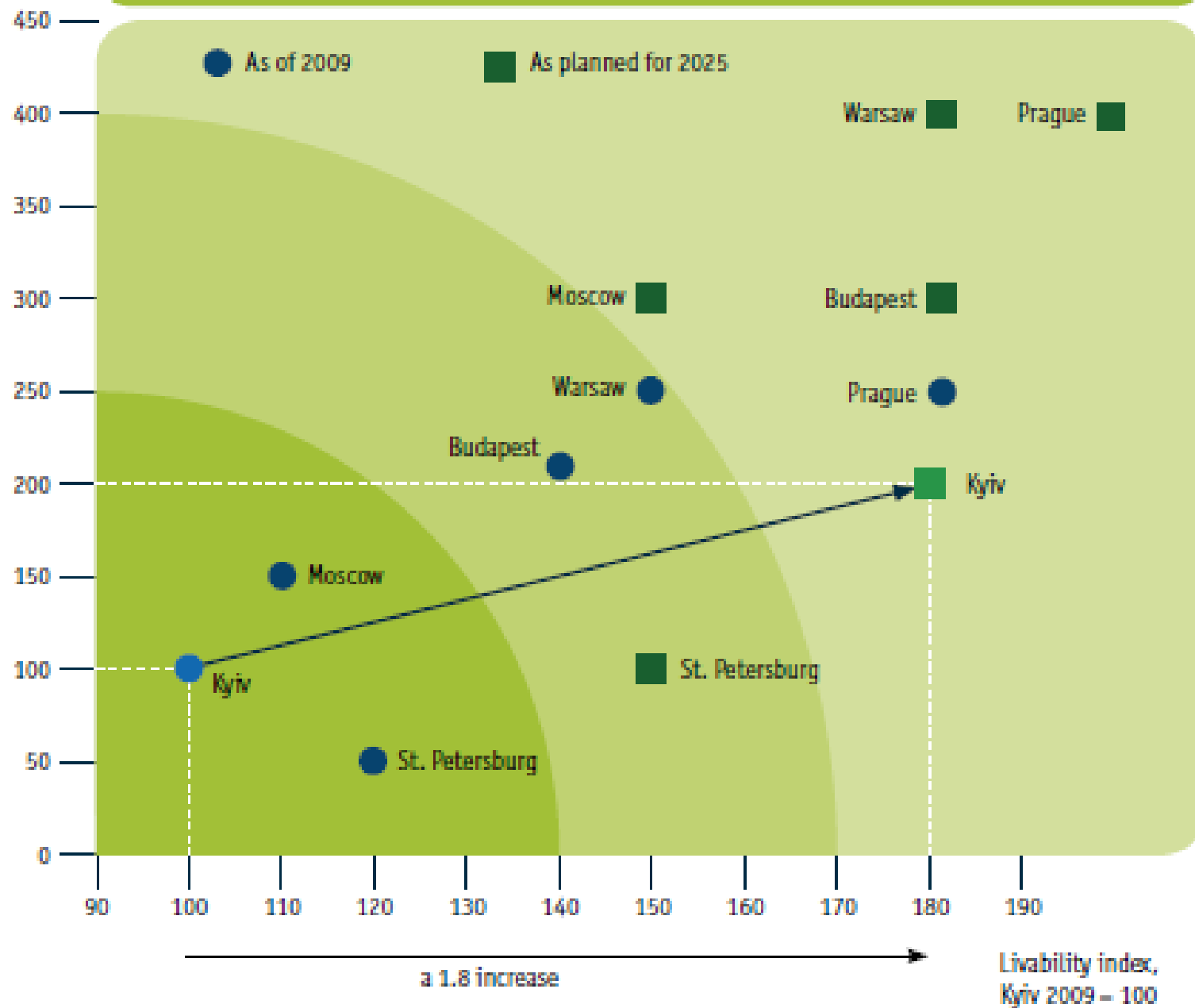


Fig. 58. SWOT-analysis methodology

Contents		Evaluation method	
Indicator: GRP/per capita Citizens' employment, average able income as well as the mes distribution in the		Basic level and strategic goals Annual dynamics monitoring Monitoring of the position with regard to reference cities	
Criterion	Position '12 ¹	National level	City level
Business conduct easiness	152 (out of 183)	Legal system Sovereign rating	
Financial	Loan granting	24	Bank regulation Innovative business financing
	Taxes payment	181	Majority of taxes at the national level, centralized taxation administration Rates of some taxes (tourism, property tax)
	Business opening	112	List of procedures, general regulation Administration of procedures, registration of foreign direct investments
Non-financial	Work with permits	180	Types of activities subject to licensing, permits introduced only by laws Some permit authorities at a local level, some permits and approvals introduced by local administration bodies
	Real estate registration	166	General regulation Administration of registry maintenance procedures
	Protection of investors	111	Corporate and stock exchange legislation None
	International trade	140	Customs bodies managed at the national level None
	Contracts Implementation	44	Court system and legislation None
	Business termination	156	General regulation Administration of procedures
- local business representatives - foreign investors		surveys, interviews and questionnaires	

Public opinion

- surveys conducted among citizens of Kyiv and suburbs (February 2011, 1,600 respondents)
- public discussion of the strategy, including through the Kyiv Strategy 2025 portal



International experience and trends

- experience of development of eastern European capitals
- world trends of urban

Expert opinion

- survey conducted among more than 30 experts and public opinion leaders
- opinions of more than 100

Data analysis

- statistic data on the current situation in the sectors of city's vital activities
- comparative analysis of the group of similar cities



- comments proposals mass med

Cities Alliance

Cities Without Slums

- an amend-
tegy
dividual
version
/ profile

Discussion



tion



KYIV CITY DEVELOPMENT STRATEGY UNTIL 2025



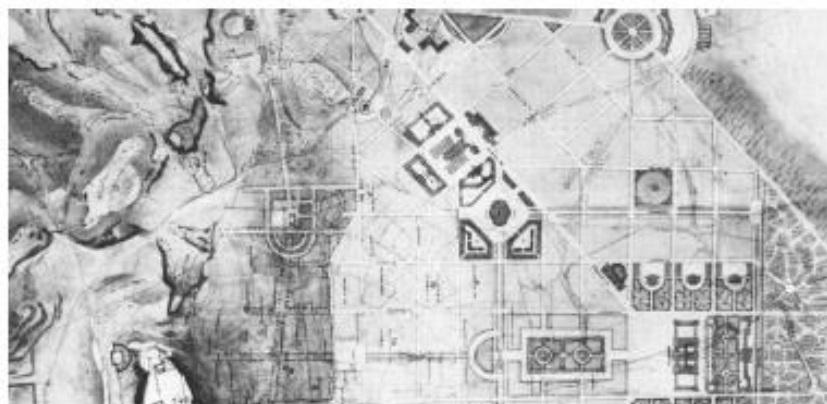
ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΝΟΜΟΣ ΑΤΤΙΚΗΣ
ΔΗΜΟΣ ΠΕΡΙΣΤΕΡΙΟΥ

ΕΠΙΧΕΙΡΗΣΙΑΚΟ ΠΡΟΓΡΑΜΜΑ 2015-2019

ΔΗΜΟΥ ΠΕΡΙΣΤΕΡΙΟΥ

ΕΝΟΤΗΤΑ 1: ΣΤΡΑΤΗΓΙΚΟ ΣΧΕΔΙΟ

ΟΚΤΩΒΡΙΟΣ 2015



ΔΙΕΡΕΥΝΗΣΗ ΟΛΟΚΛΗΡΩΜΕΝΗΣ ΑΣΤΙΚΗΣ ΠΑΡΕΜΒΑΣΗΣ ΣΤΟ ΚΕΝΤΡΟ ΤΗΣ ΑΘΗΝΑΣ

Α2 Πλήρης πρόταση και Πρόγραμμα Δράσης „

Π.Χ. Εργαστήριο Πολεοδομικού και Χωροταξικού Σχεδιασμού Πανεπιστημίου Θεσσαλίας

Δεκέμβριος 2013



1. Castle Residences
2. Island Villas
3. Peninsula Villas
4. Nireas Residences
5. Dioni Residences
6. Thetis Residences
7. Nereids Residences
8. Dining & Shopping
9. Spa & Fitness Club
10. Car Park
11. Harbour Master
12. Fuel Station
13. Boatyard
14. Chandlery
15. Cultural Centre
16. City Centre

Castle Residences offer a choice of two, three, four-bedroom apartments and duplexes with stunning views of the Mediterranean. Overlooking the Marina and the city of Limassol, they are situated on the water, in close proximity to the development's luxury dining, shopping and leisure facilities.

The spacious apartments have covered terraces, uncovered verandas or sun-decks and residents benefit from communal swimming pools, private parking and storage space.

Limassol Marina is an exciting new destination in the Mediterranean. Designed by a world-renowned team of architects and engineers, it combines elegant residences and a full service marina with an enticing mix of restaurants and shops, to create a lifestyle uniquely shaped by 'living on the sea'.











A new landmark in the business world







CUTLER

Coastal Urban development through the Lenses of Resiliency

CUTLER

- | | | | |
|-----|--|---|-----------|
| 1. | Εθνικό Κέντρο Έρευνας και Τεχνολογικής Ανάπτυξης | } | Ελλάδα |
| 2. | DRAXIS ENVIRONMENTAL S.A. | | |
| 3. | Δήμος Θεσσαλονίκης | | |
| 4. | Δημοκρίτειο Πανεπιστήμιο Θράκης | } | Γερμανία |
| 5. | UNIVERSITAET KOBLENZ-LANDAU | | |
| 6. | EUROSOC DIGITAL GGMBH EUD | } | Τουρκία |
| 7. | Δήμος Αντάλειας | | |
| 8. | Sampas S.A. Turkey | | |
| 9. | IMEC | } | Βέλγιο |
| 10. | KATHOLIEKE UNIVERSITEIT LEUVEN KU Leuven | | |
| 11. | Δήμος ANTWERPEN | | |
| 12. | OULUN YLIOPISTO UOULU | } | Φινλανδία |
| 13. | EMC INFORMATION SYSTEMS INTERNATIONAL | | |
| 14. | BYRNE LOOBY PARTNERS WATER SERVICES LIMITED | | |
| 15. | CORK COUNTY COUNCIL CCC Ireland | } | Ιρλανδία |



Σας ευχαριστώ για το χρόνο σας