

#### **Introductory remarks**

- On the whole urbanization and political development of the World System are tightly connected with each other.
- The "urban" way of state formation was one of the most important.
- Mutual influence of urbanization and statehood factors was very strong during the last five thousands years.

#### The main goals of the paper

- to show the stages of both the political and urban development of the World System since the 4<sup>th</sup> millennium BCE
- to demonstrate the correlation between the dynamics of the size of the territory controlled by states and the dynamics of the world urban population

#### Note

However, I do not include in my analysis the type of early (or archaic) state. In this presentation I only discuss two evolutionary types of states, namely: developed states and mature states.

What do I mean?

#### Starting with Claessen and Skalnik, two main stages of the evolutionary sequence of statehood are usually identified as following:

#### **EARLY STATES - MATURE STATES**

However, this scheme poorly describes the evolution of the statehood, because it is quiet evident there are three levels of statehood:

- weakly centralized early states based on the ruler's clan;
- bureaucratic pre-industrial states;
- nation-states of the industrial epoch.

That is the reason why I have suggested a new scheme.

I propose the following sequence of the evolution of statehood:

THE BARLY STATES

THE DEVELOPED STATES

THE MATURE STATES

- **EARLY STATES** are not sufficiently centralized states with underdeveloped administrative-political and social structures.
- **DEVELOPED STATES** are the centralized states of Late Antiquity, the Middle Ages, and the Early Modern period that politically organized societies with distinct estate-class stratification.
- THE MATURE STATES are the states of the industrial epoch, in which representative democracy has proliferated, estates have disappeared and the industrial classes have formed.

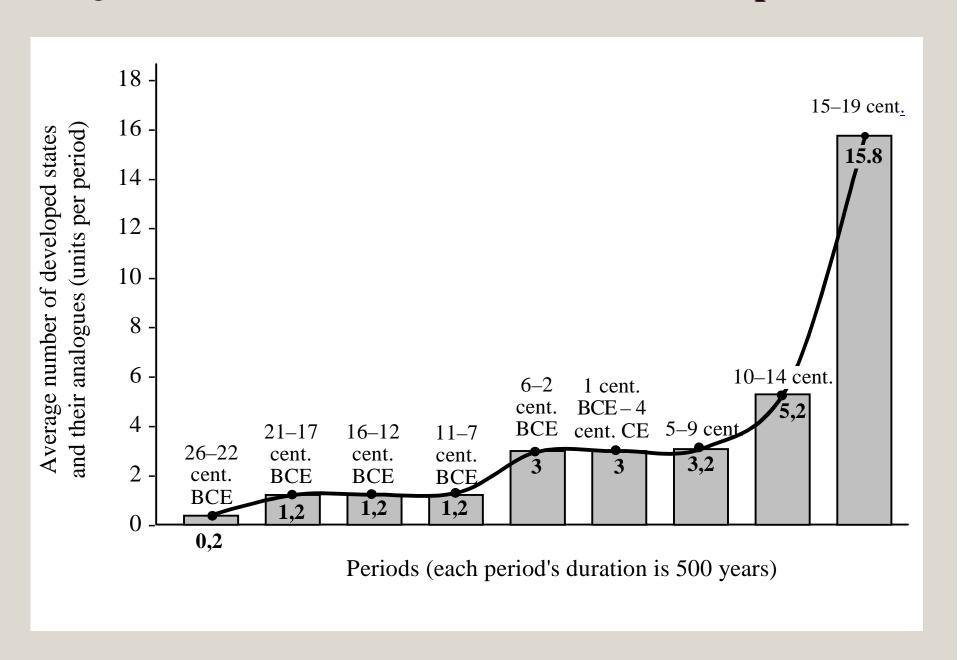
The first **developed** states appeared in the late 3<sup>rd</sup> - the first half of the 2<sup>nd</sup> millennia BCE.

They were the Third Dynasty of Ur state, the kingdom of Hammurabi in Mesopotamia, Middle and New Kingdom Egypt.

The first **mature** states only appeared in the Modern Era in the late 17<sup>th</sup> century in Europe.

Thus, in the Antiquity and Middle Ages there were no mature states, but only early and developed ones.

#### Diagram 1. Growth of the Number of Developed States



## Diagram 2. Dynamics of the Mature States' Number (1500–1900 CE)

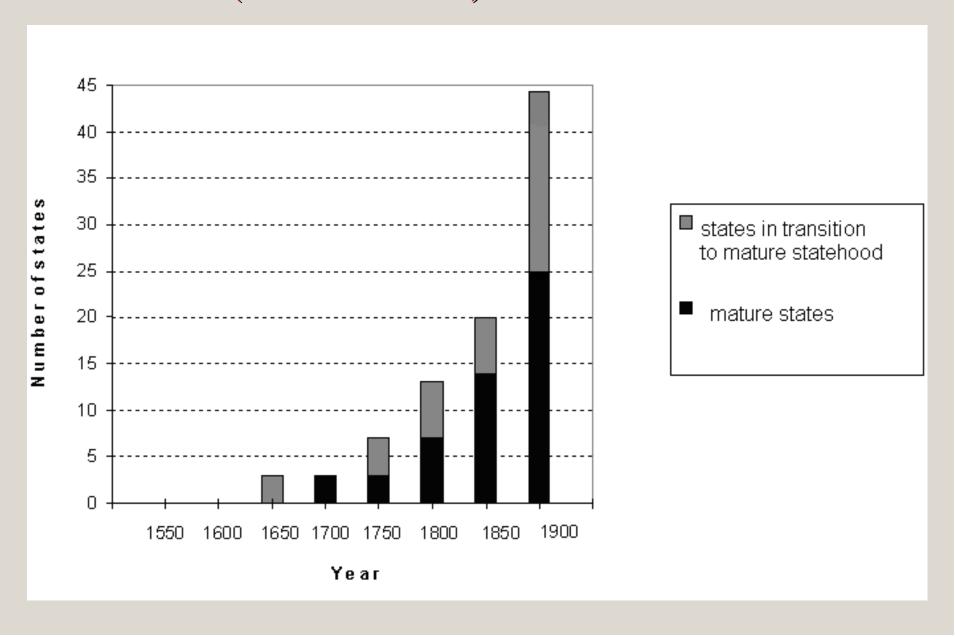
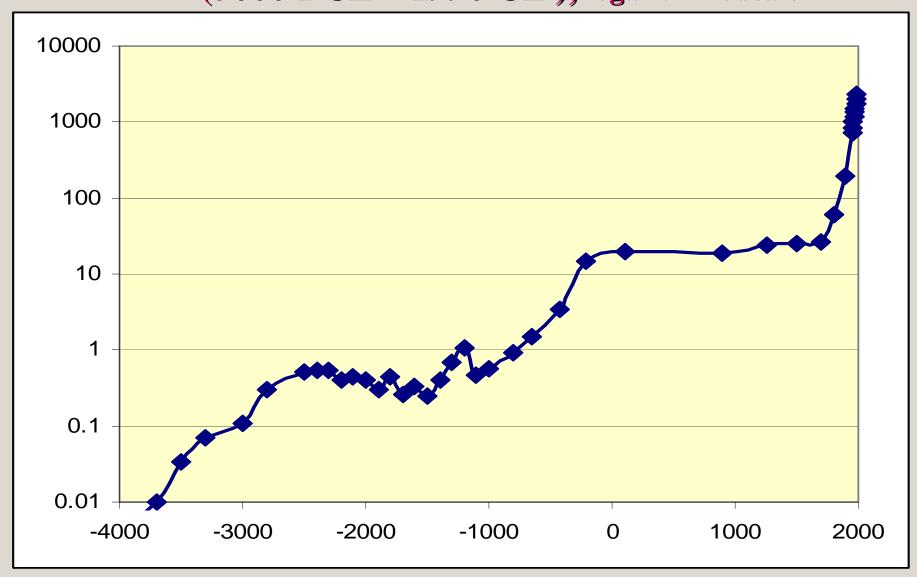


Diagram 3. Dynamics of the World Urban Population (in mln), for cities with >10000 inhabitants (5000 BCE – 1990 CE), logarithmic scale



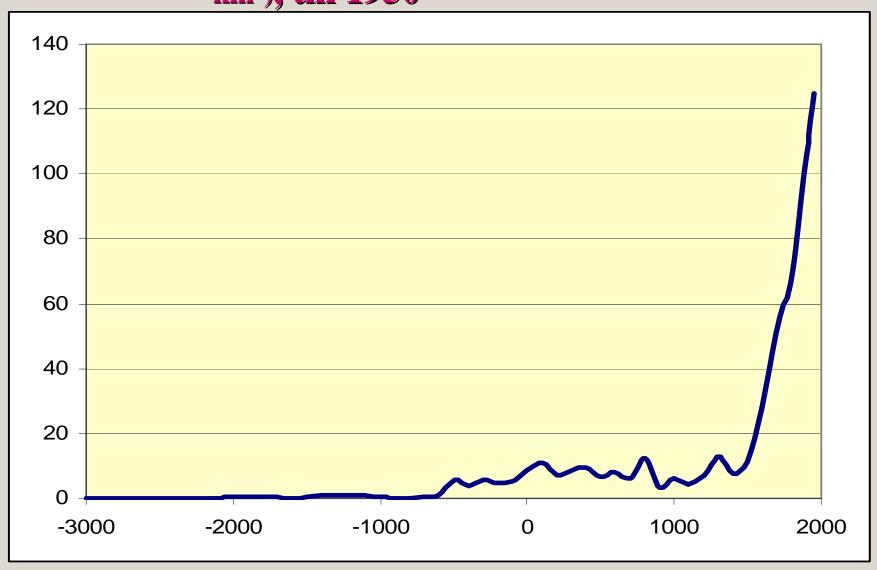
### Three main phase transitions and two main attractors

The first phase transition dates to the late 4<sup>th</sup> and early 3<sup>rd</sup> millennia BCE.

After more than thousand years of fluctuation around the respective attractor **the second phase transition** began in the early **1**<sup>st</sup> **millennium BCE.** 

After a long period of stagnation and fluctuation of the level of the World System urban population in the Middle Ages we can observe the next very significant acceleration of the world urban population growth in the Modern Era (the third phase transition).

Diagram 4. Dynamics of Territory Controlled by the Developed and Mature States (millions km²), till 1950



#### Phase transitions

The first phase transition of growth of the territory controlled by **DEVELOPED** states took place in **2000–1600 BCE** when the first developed states appeared.

The second phase transition took place in the late 1<sup>st</sup> millennium BCE.

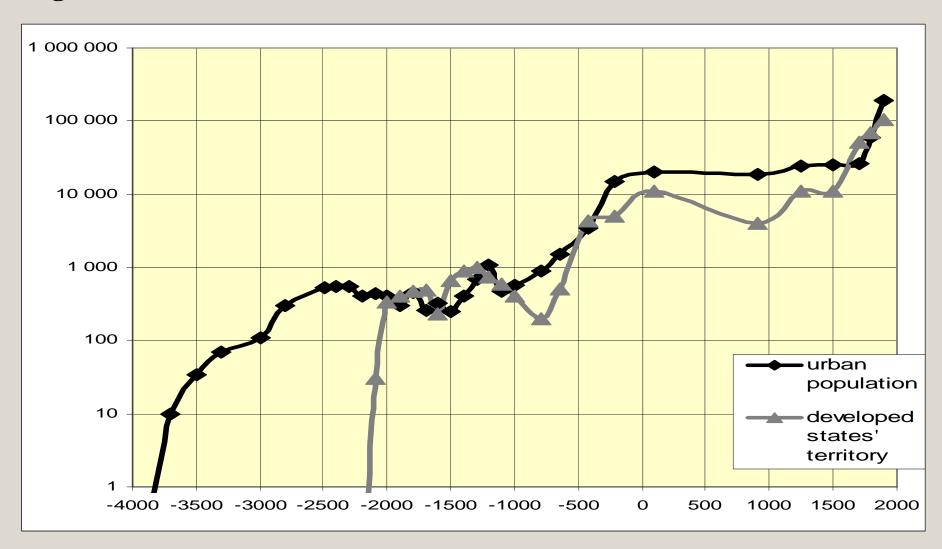
A new qualitative breakthrough can be dated to the mid 15<sup>th</sup> century.

#### Transitions and attractors

During this period the growth of the territory of developed states continues in the growth of the territory controlled by the mature states. So the curve becomes steeper.

- The first attractor of the Diagram we see between about 1500 and 500 BCE.
- The second one is between about 100 BCE and 1300 CE.

Diagram 5. Dynamics of World Urban Population (thousands) and the Size of the Territory Controlled by the Developed and Mature States (thousands km²), till 1900 CE (logarithmic scale)



- The first phase of rapid growth of the world urban population was connected with the development of **EARLY** states.
- Then we see the growth of the number of developed states correlated with the radical growth of the World System urban population observed within precisely the same period.
- The formation of the first **DEVELOPED** states affected the World System urban population dynamics in a rather significant way.

- A new phase of the radical growth of urban population as well as the growth of size of the territory controlled by the **DEVELOPED** states is observed in the 1<sup>st</sup> millennium BCE.
- In the Modern Era we can see the next very significant acceleration both of urban population and of the size of the territory controlled by the **DEVELOPED** and especially by **MATURE** states appeared.

Diagram 6. Dynamics of World Urban Population (thousands) and the Size of the Territory Controlled by the Developed and Mature States (thousands km²), 1000 BCE – 1900 CE

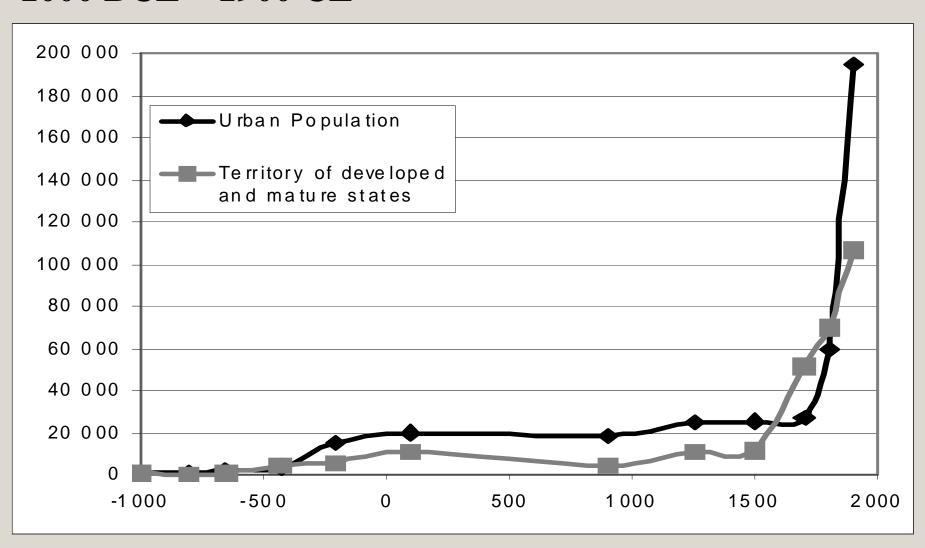
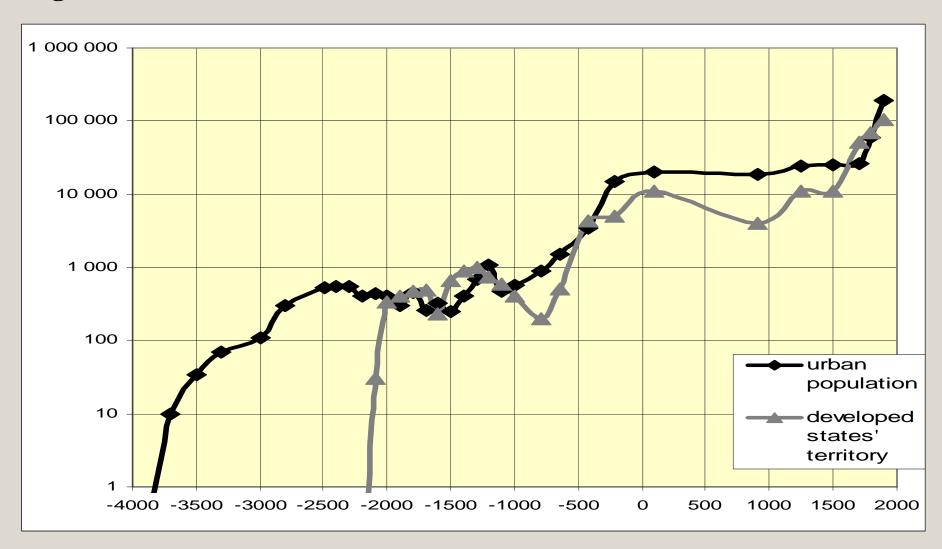


Diagram 5. Dynamics of World Urban Population (thousands) and the Size of the Territory Controlled by the Developed and Mature States (thousands km²), till 1900 CE (logarithmic scale)



In general, we find in the Diagram the same system of attractors and phase transitions:

- a major phase transition in the 1st millennium BCE;
- then there is a period of more than 1000 years long, when both indexes fluctuated within certain attractor till the Modern Era;
- then a new phase transition came.

#### Time lag in the 1st millennium BCE

✓ However in spite of all the synchrony, there are a few important time lags.

Thus during the phase transition of the 1<sup>st</sup> millennium BCE the surge in the size of territory controlled by the developed states lagged behind the phase transition in the dynamics of the World System urbanization.

#### Time lag in the 1st millennium BCE

This lag can be interpreted as evidence for the following fact:

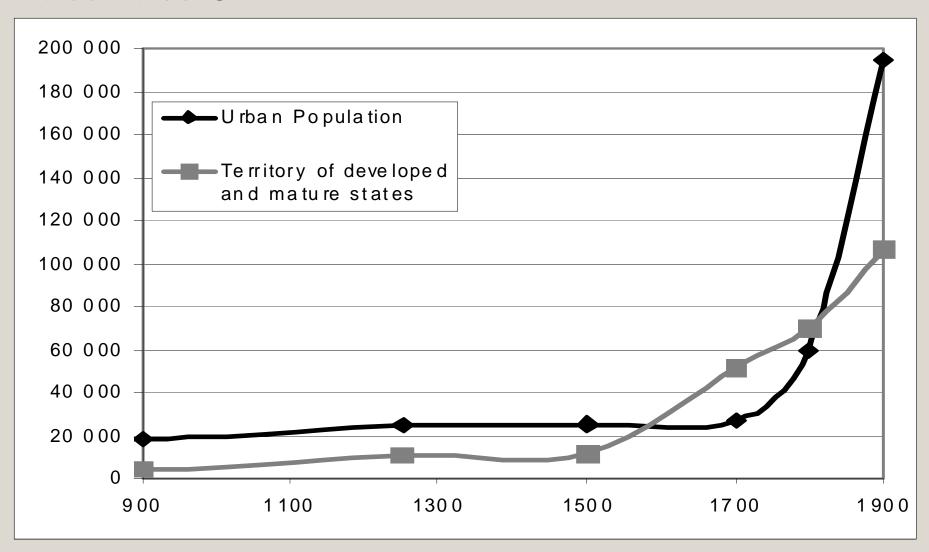
- in the 2<sup>nd</sup> the first half of the 1<sup>st</sup> millennia BCE the potential of economic and military-technological basis for the formation of new developed states without iron metallurgy and other new technologies turned out to have been entirely exhausted,
- whereas it took the new technologies a considerable period of time to diffuse throughout the World System.

# Time lag in the Early Modern period

On the contrary during the phase transition of the Early Modern period, the rapid increase in the size of the territory controlled by developed and mature states had begun first.

Only **two centuries later** there started an equally rapid and impetuous **growth in the world's urban population**. This pattern of increase in territory and urban population becomes especially clear if we consider the dynamics of these variables within the 2<sup>nd</sup> millennium CE.

Diagram 7. Dynamics of the World Urban Population (thousands) and the Size of the Territory Controlled by the Developed and Mature States (thousands km²), 900–1900 CE



## Time lag in the Early Modern period

This lag needs special comments.

- First of all, the developed states of that period were **predominantly agrarian**.
- Besides, the impetuous growth of this territory in the  $16^{th} 18^{th}$  centuries was tightly connected with the **formation and vigorous territorial expansion of some developed states** (*e.g. Mughal India, Russia*, the *Ottoman Empire*).

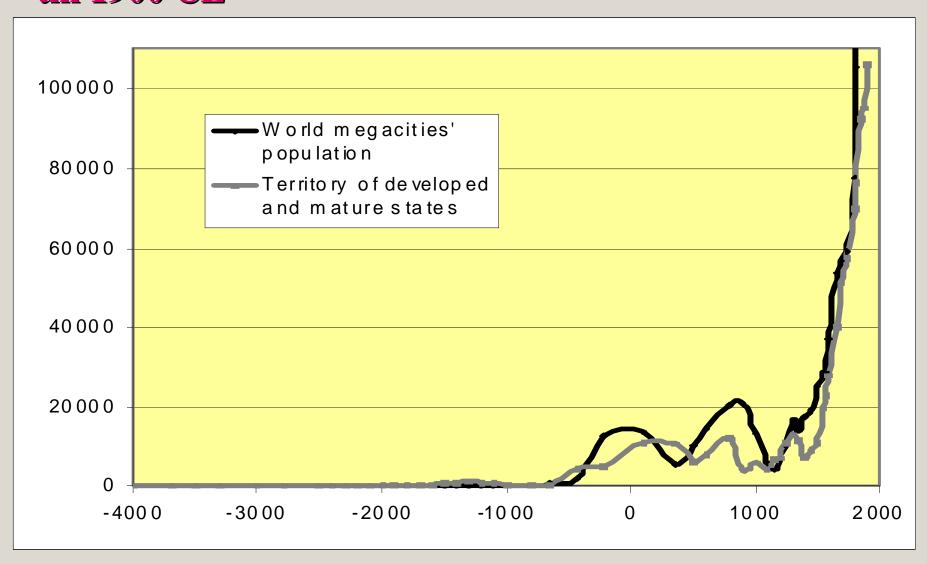
However, such an expansion frequently involves underpopulated and totally unurbanized territories (*e.g.*, with the Russian expansion into Siberia).

At the same time in the developed states an important role was played by large cities, and especially capitals whose population could be very large for agrarian societies.

So the tight interconnectedness of the dynamics of developed statehood and the urbanization of the World System looks especially salient if we consider the population dynamics of *megacities* (that is, cities with more than 200 thousand inhabitants each).

This synchronicity is not coincidental at all. The point is that the pre-industrial megacities were, to a considerable degree, a creation of the developed statehood.

Diagram 8. Dynamics of the World Megacities' Population (hundreds) and the Territory of the Developed and Mature States (thousands km²), till 1900 CE



**During the 16<sup>th</sup>–18<sup>th</sup> centuries** DEVELOPED STATES could not secure such an urban growth that would match the extent of their territorial expansion. As its formation and proliferation took a considerable period of time, urbanization was bound to lag behind the territorial growth of the developed states.

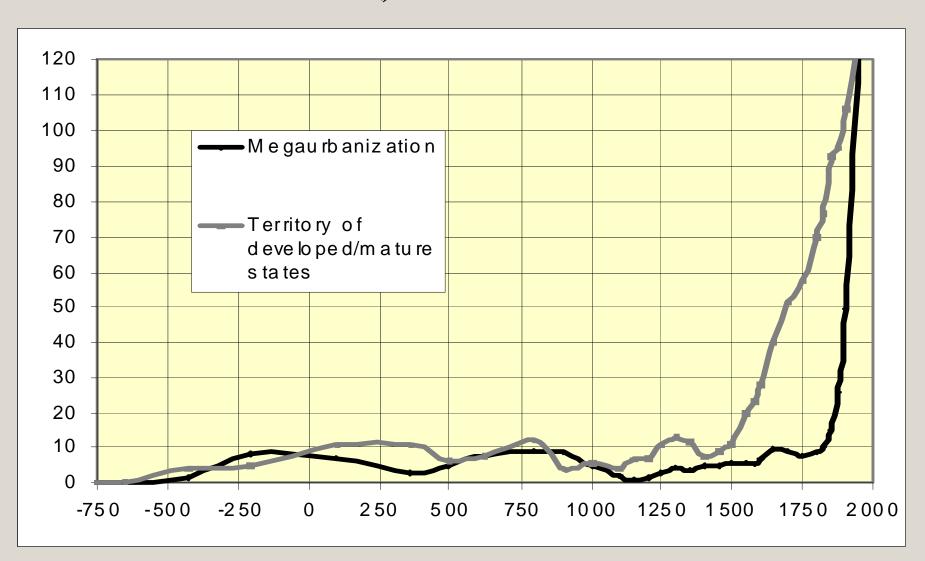
The further development of the World System is directly connected with the industrial breakthrough of the 18<sup>th</sup>-19<sup>th</sup> centuries. The transition to industrial production led to the formation of a new evolutionary type of state: THE MATURE STATE. By the 19<sup>th</sup> century it had become dominant in Europe and the New World.

During the industrial epoch the economy developed mostly within cities. That is why growth of the territory controlled by the MATURE STATES was indissolubly connected with the growth of cities, and a radical growth of the degree of urbanization.

Such development led to a vigorous increase in **world urbanization** that against the background of the hyperbolic growth of the world population led to:

- explosive, quadratic-hyperbolic growth of the world urban population;
- explosive growth in the number of megacities and their sizes.

Diagram 9. Dynamics of World Megaurbanization (proportion of megacities' population in the total population of the world, ‰) and the Territory Controlled by Developed / Mature States (mln km²), till 1950



# Thank you for attention!