

International Transport Forum

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The prospects for inter-urban travel demand

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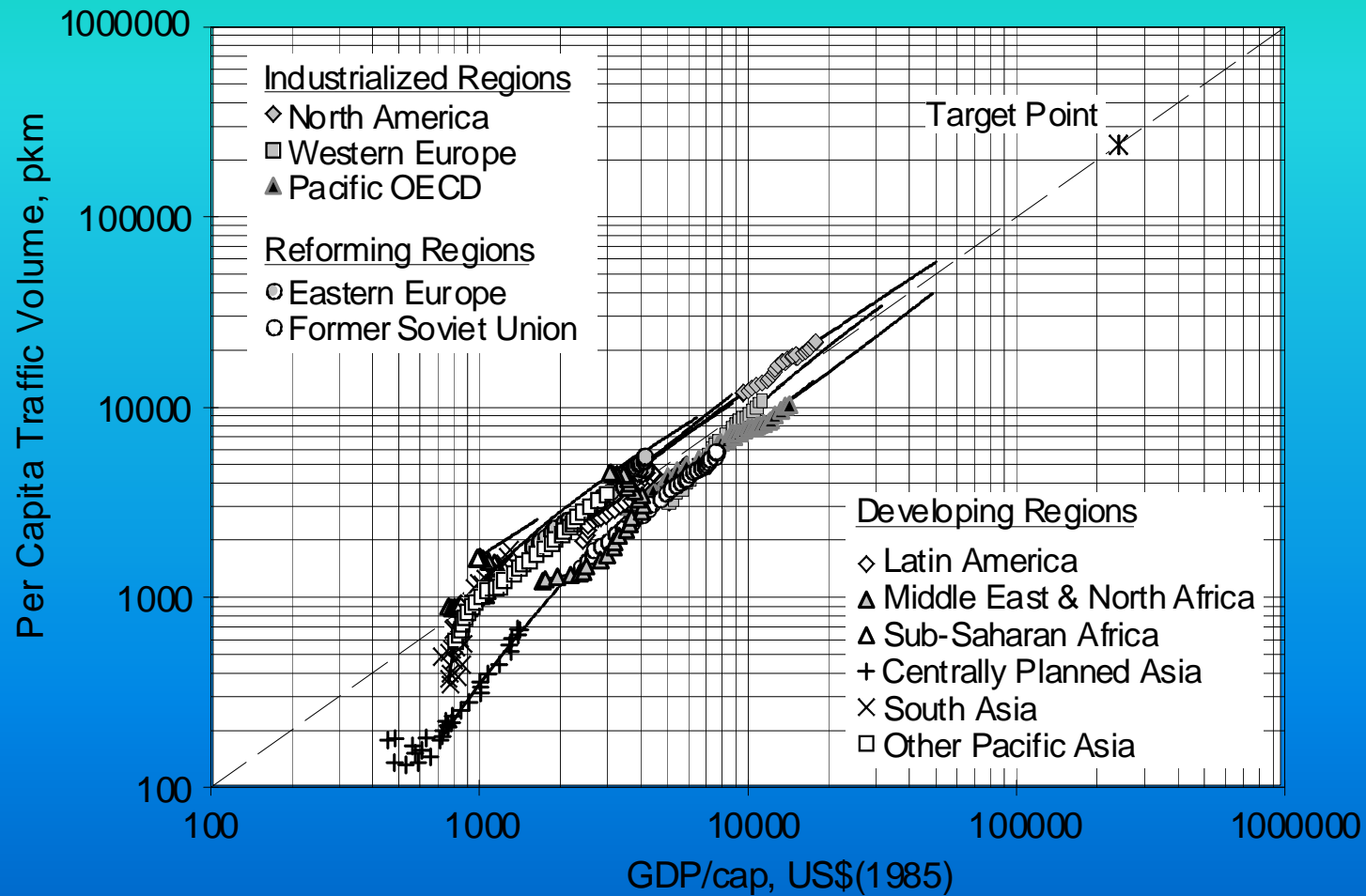
Contents

- 1) The “iron law” of coupling
 - Macroeconomic data about coupling between GDP and mobility
 - Microeconomic basis: the key role of speed and value of time
- 2) Decoupling: are saturation and mitigation enough ?



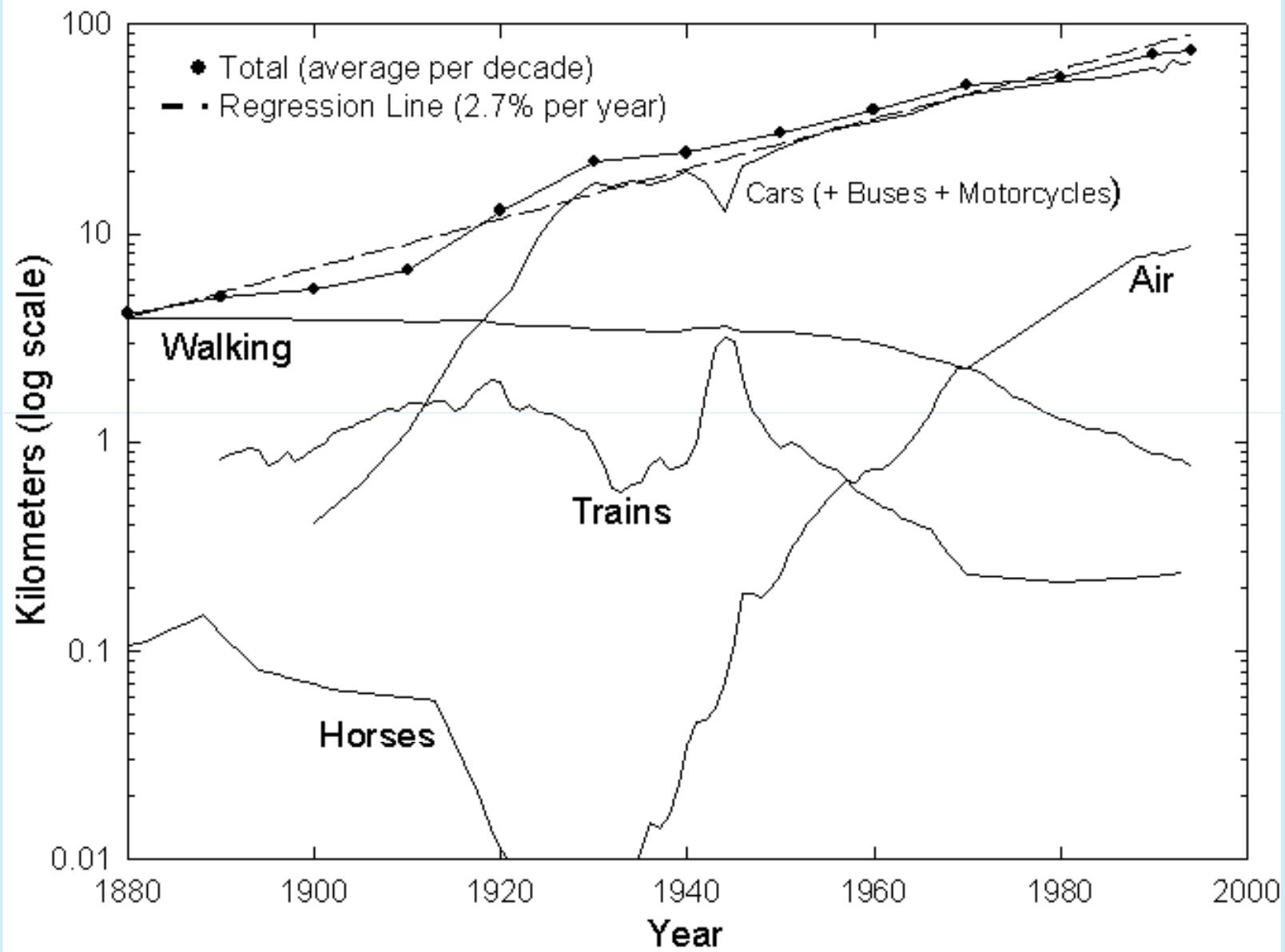
TOTAL MOBILITY

(Data Points: 1960 - 1990; Curves: 1960 - 2050)



Source: Schafer and Victor (2000); economic growth rates based on IPCC IS92a/e scenario

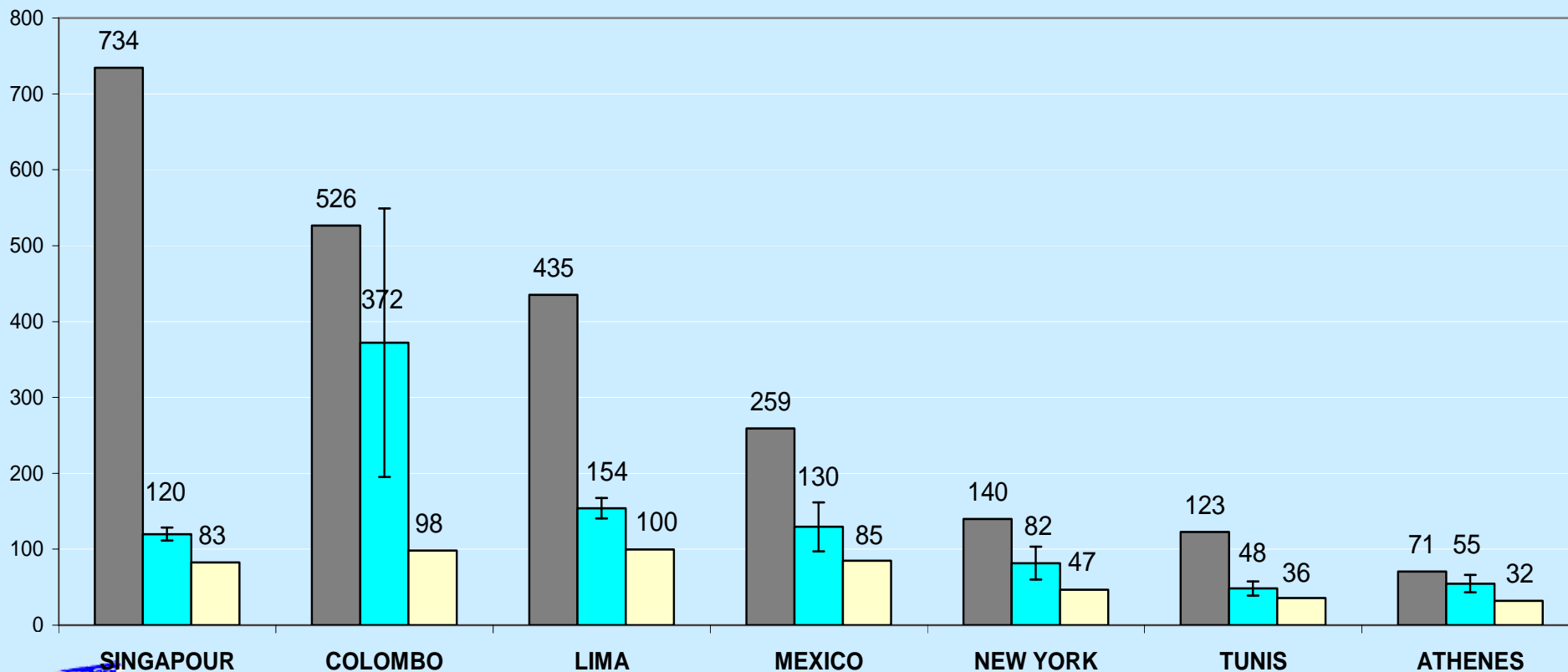




Price of air ticket in terms of minimum wage (nb of hours)

h. de smic

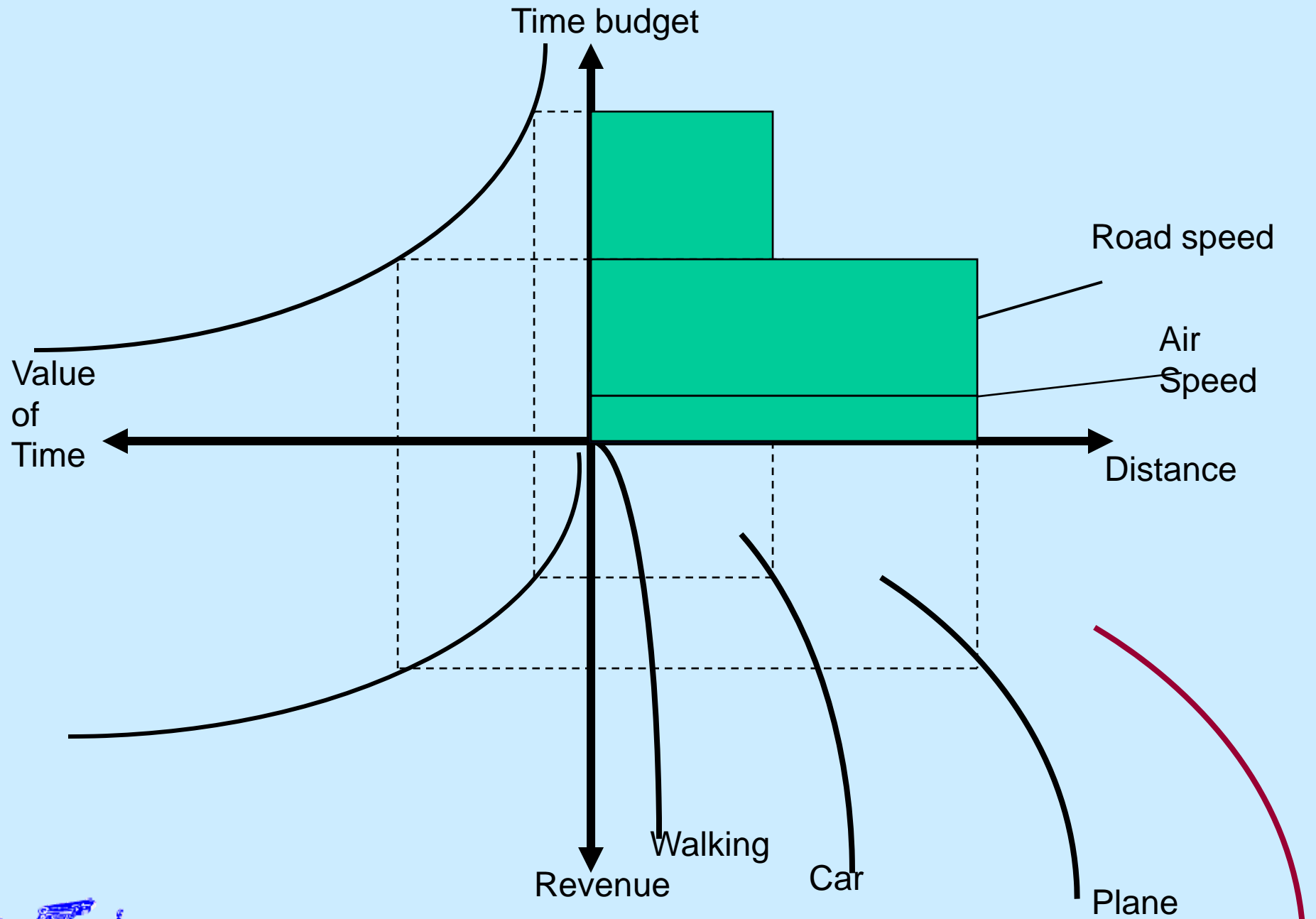
- coût d'un trajet Air France régulier évalué en heures de smic 1980 (classe éco)
- coût d'un trajet Air France régulier évalué en heures de smic 2005 (classe éco, moyenne des prix basse et haute saison)
- coût d'un trajet, sélectionné parmi les moins chers, évalué en heures de smic 2005



Extrait du travail de thèse "Optimisation Spatio-Temporelle des Déplacements Touristiques", v. Bagard, LET 2005

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Some lessons about coupling

- The microeconomic « iron law » of coupling is related to microeconomic optimisation
- A higher revenue leads us to look for « variety » and then to seize the opportunity of a higher and cheaper speed to increase our average distance of travel
- Farer, faster and more often for a shorter stay !

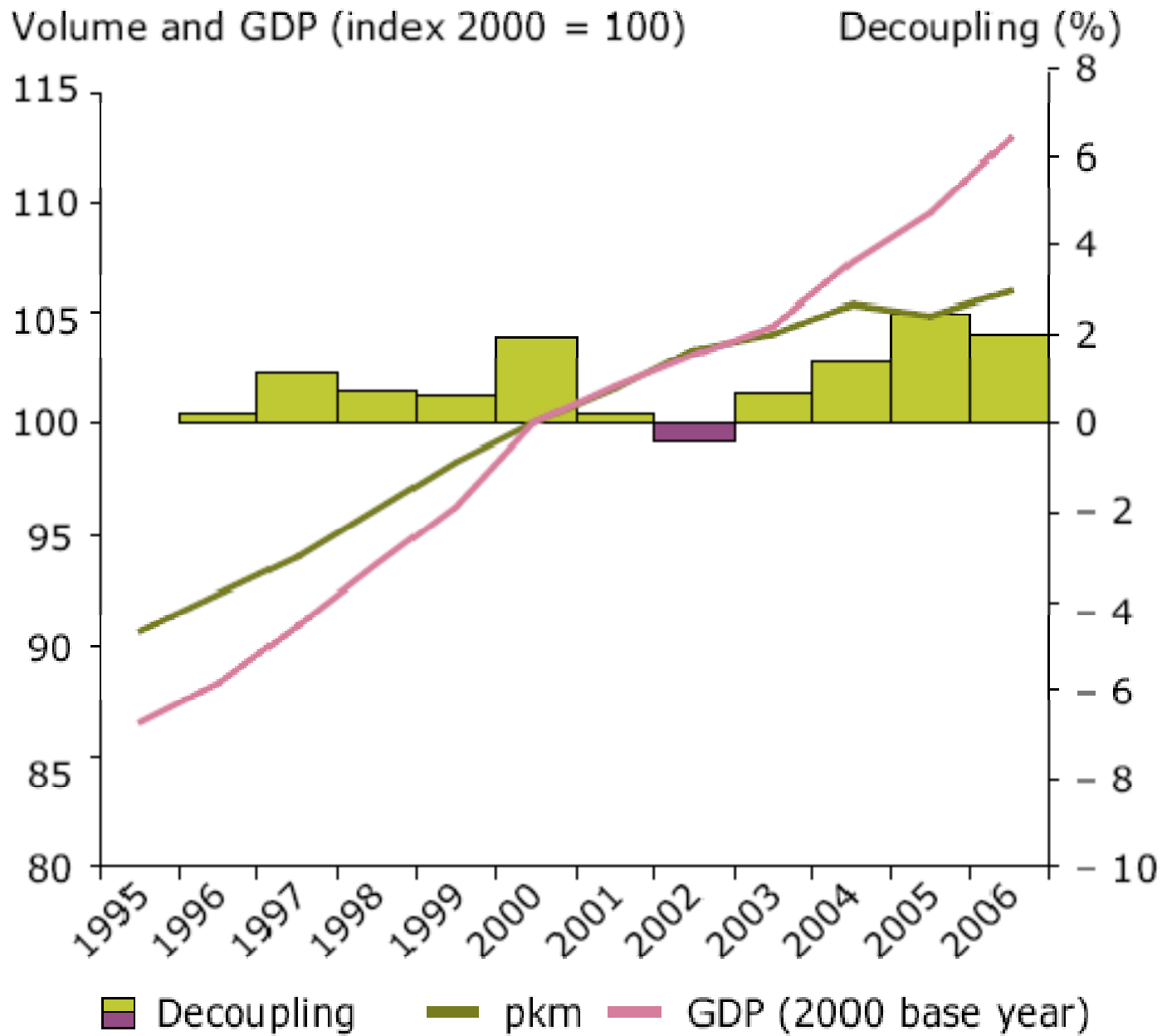


2) Decoupling : between saturation and mitigation

- Where does the saturation come from ?
- Mitigation: towards a climatic tyranny?



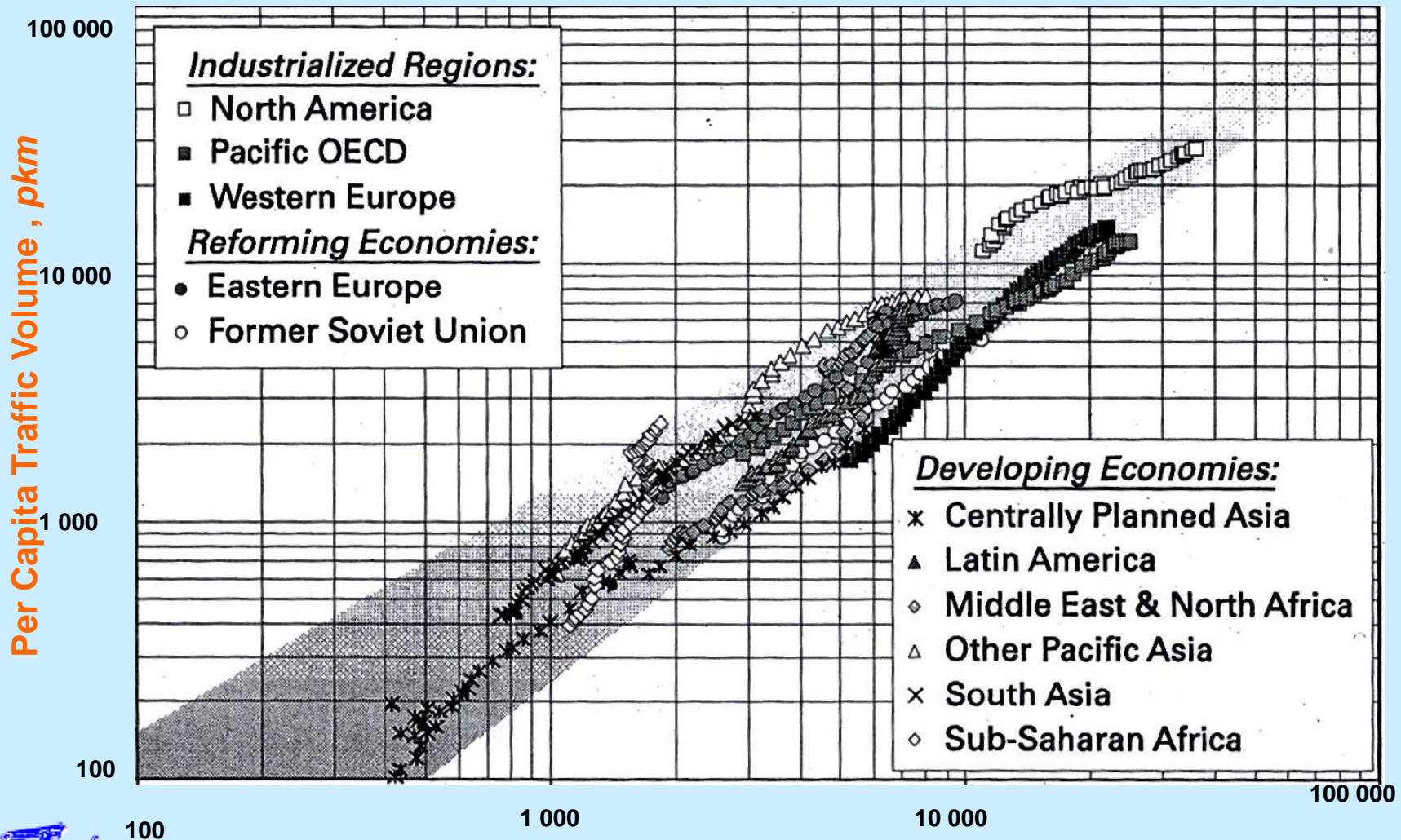
Road traffic saturation in Europe



Global mobility

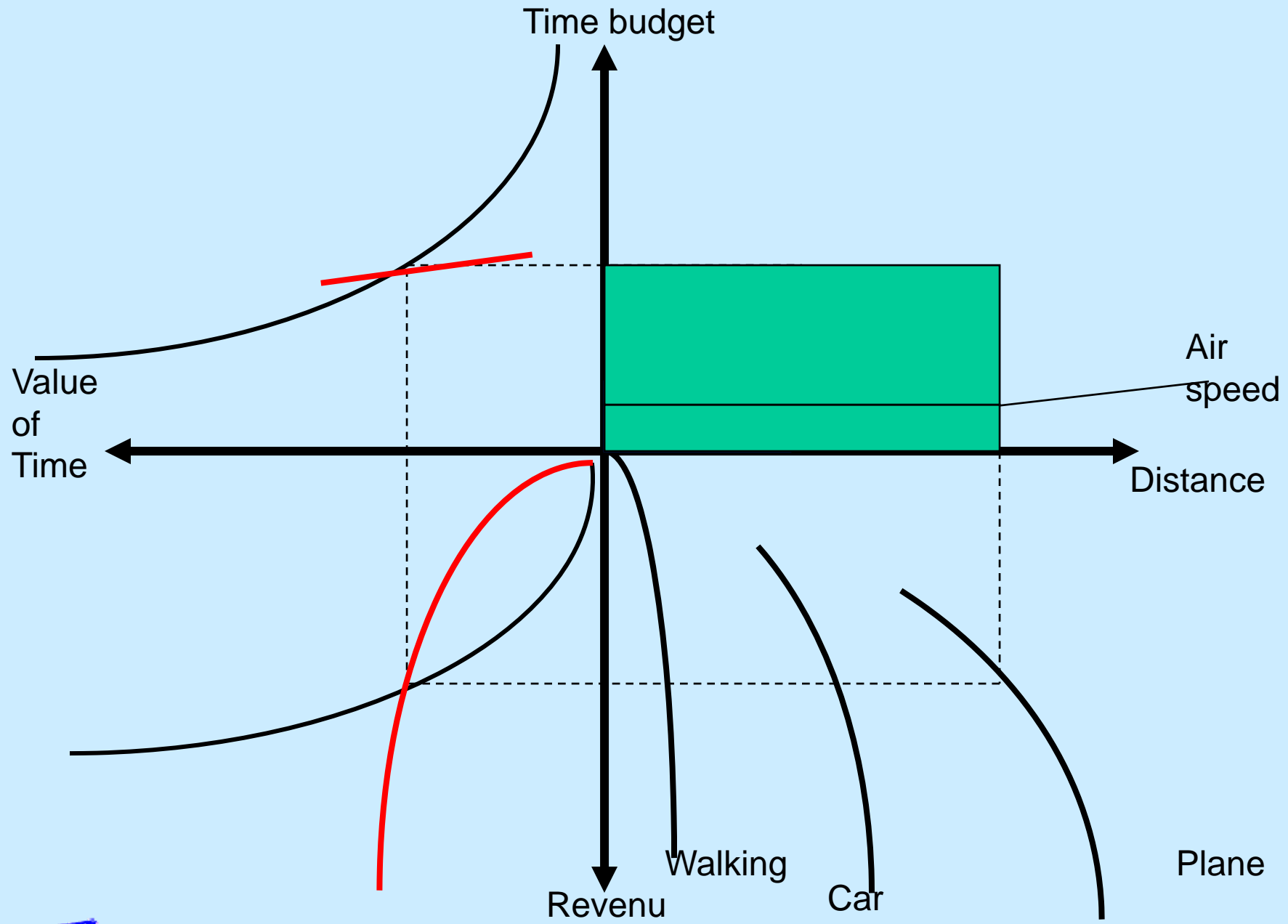
(data points : 1960-2000)

Target point
 $289,000\text{km/year} = 791/\text{day}$

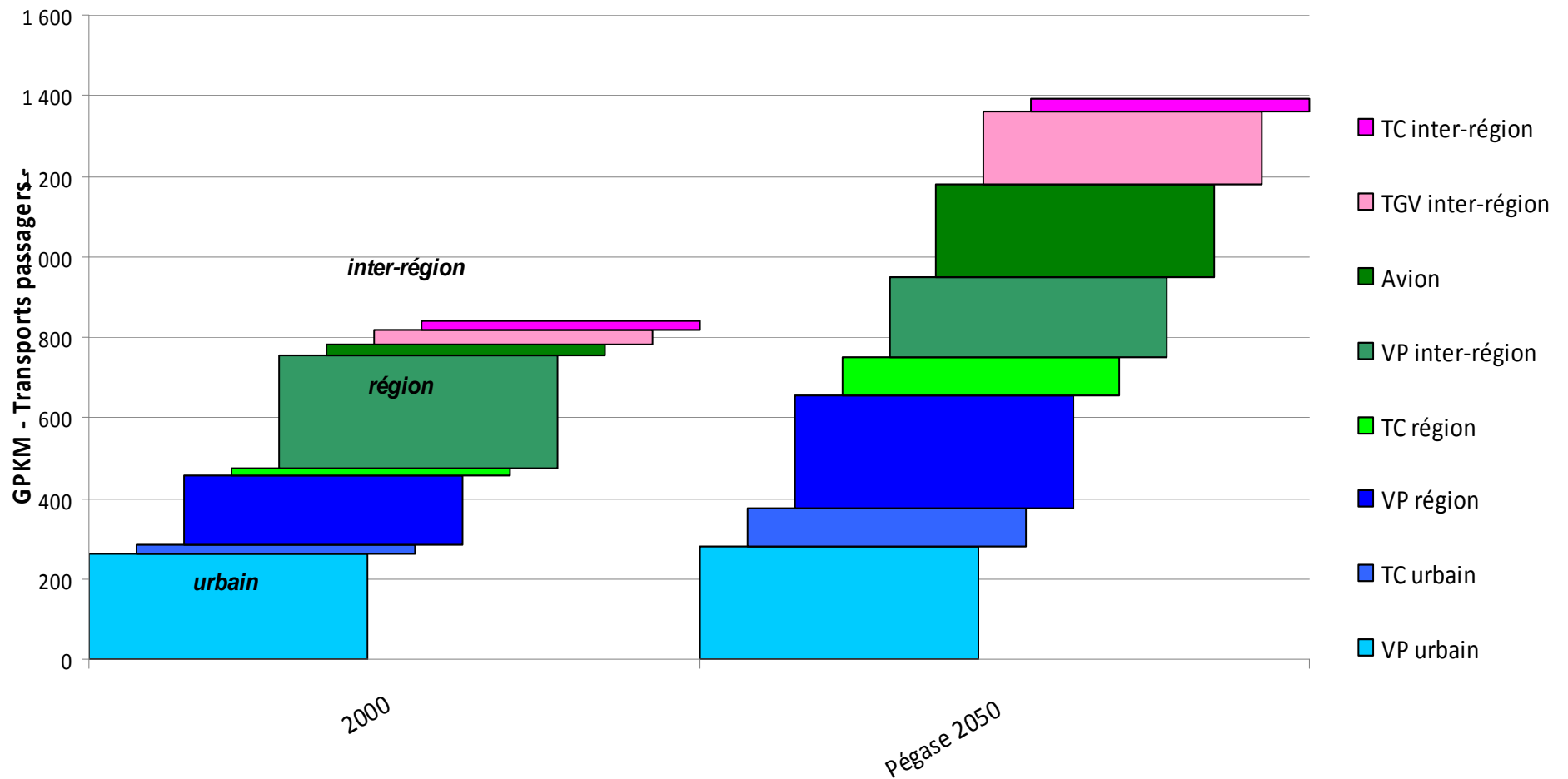


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GDP / cap, US\$ (2000)

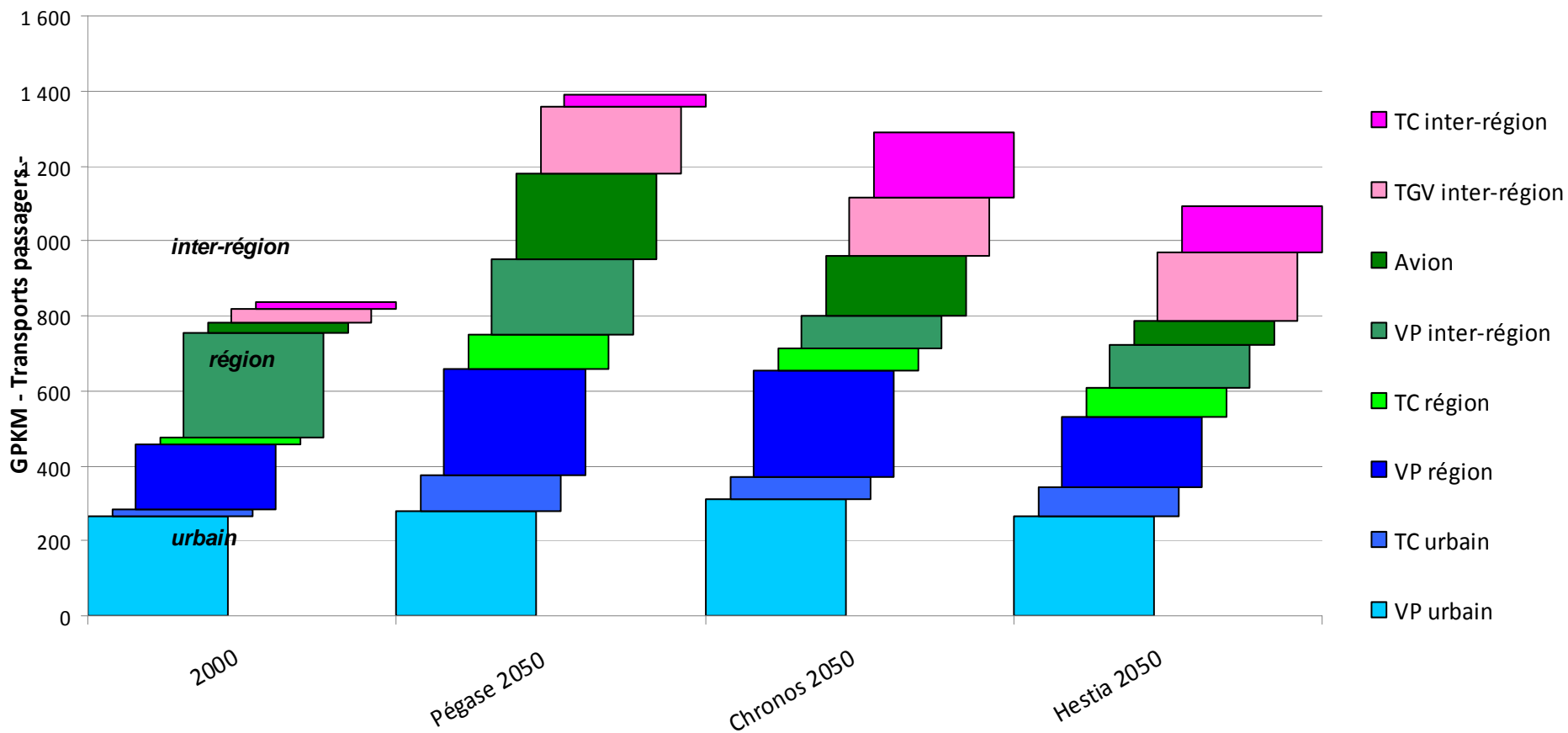
Source : Schafer and Victor (2000) :
 economic growth rates based on IP CC IS92a/e scenario



GPKM par zone et par mode - 2000-2050 - Transport de Passagers - France



GPKM par zone et par mode - 2000-2050 - Transport de Passagers - France



Conclusion

- The demand for speed is directly linked to the GDP and to the individual welfare
- The demand for speed is far from saturation
- Do we need new faster modes ?
- Or do we need to limit the high speed modes development in relation with their GHG emissions ?

