



# BDT

*Updating traffic and tariff trends*

## **Seminar on Tariffs, Regulatory and WTO Issues and their impact on the trade of telecommunication services in Central America**

*Tegucigalpa (Honduras), July 10-12, 2000*



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## Updating traffic and tariff trends

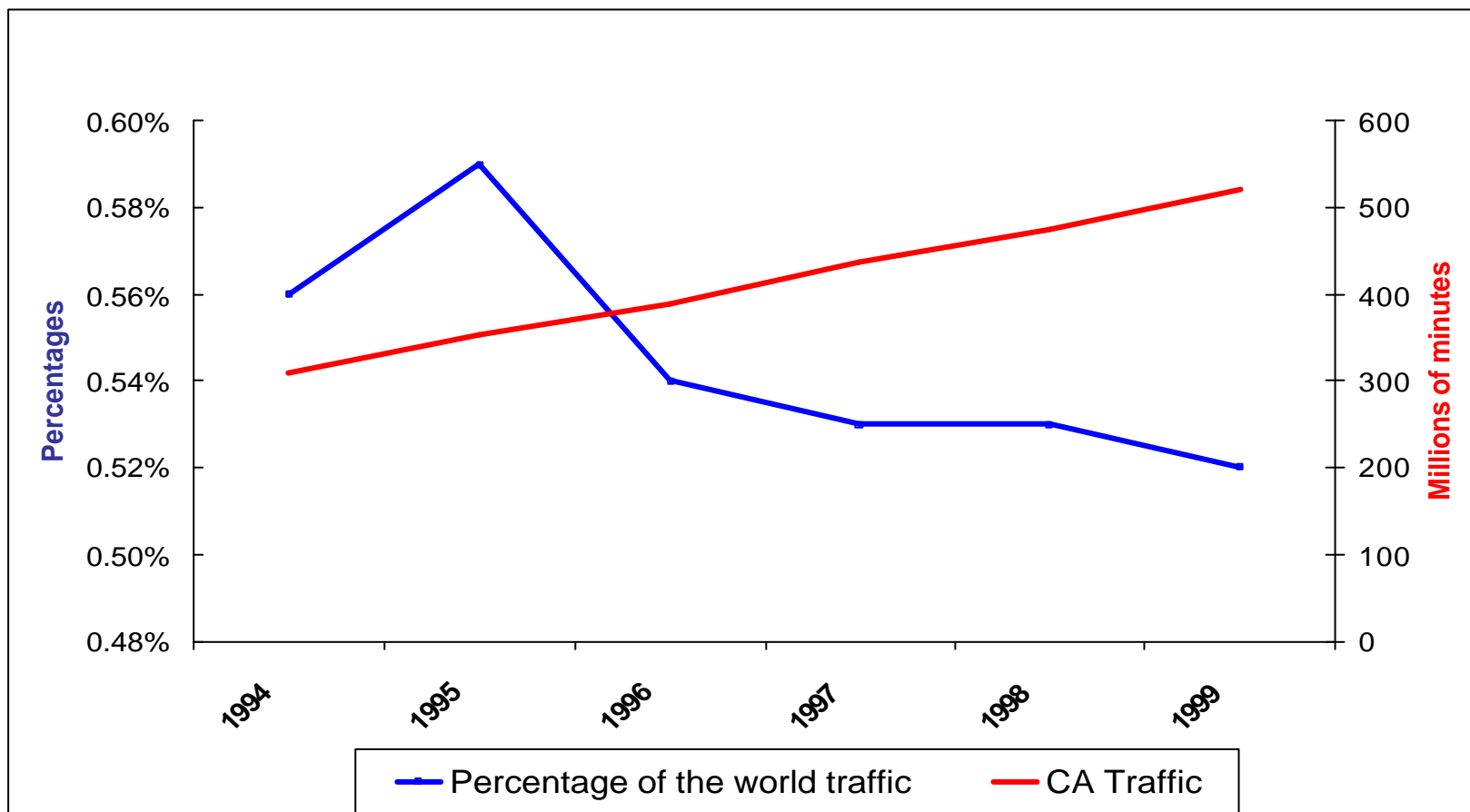
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# Central American Traffic

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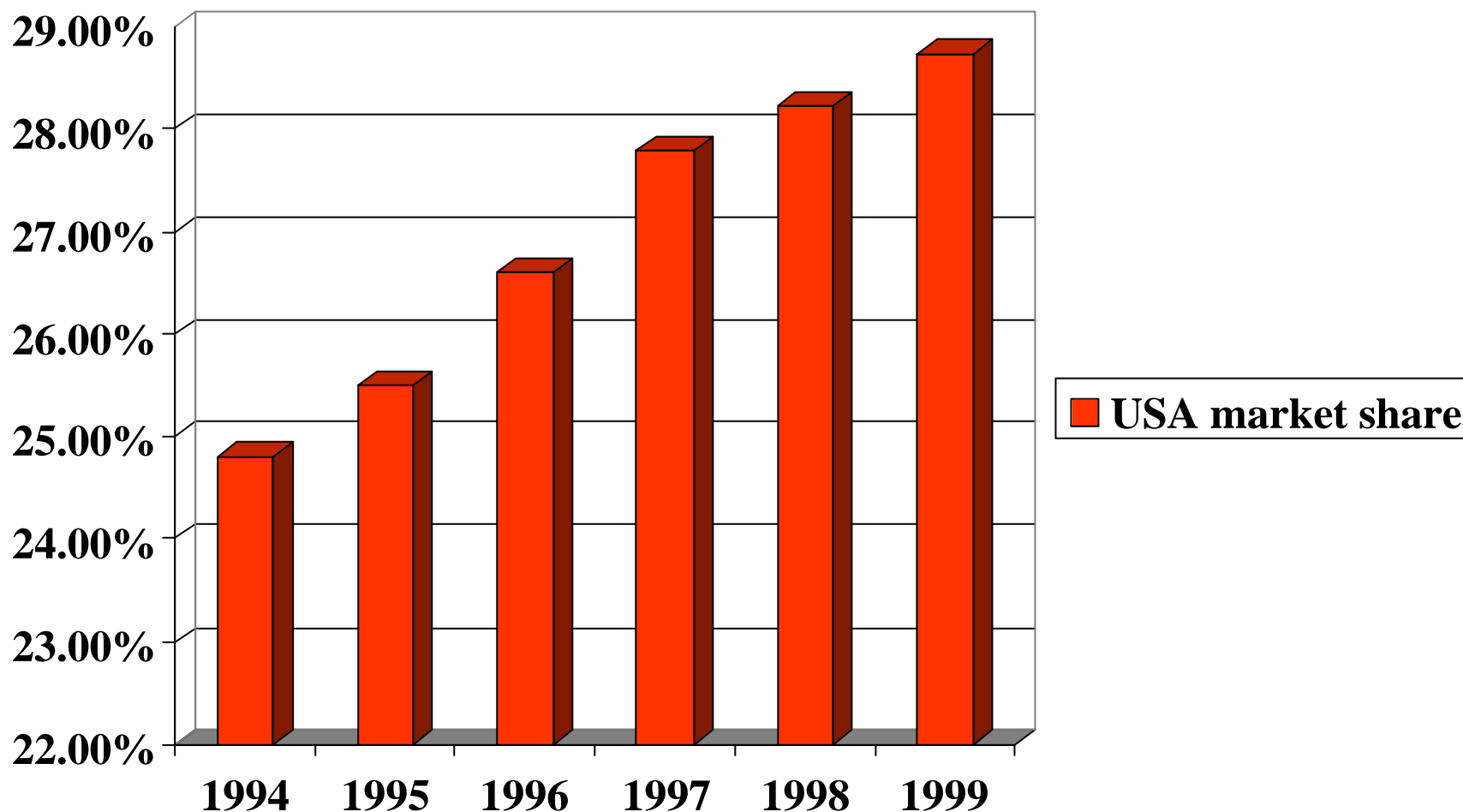




• *Share of the USA in the  
International telephone market*

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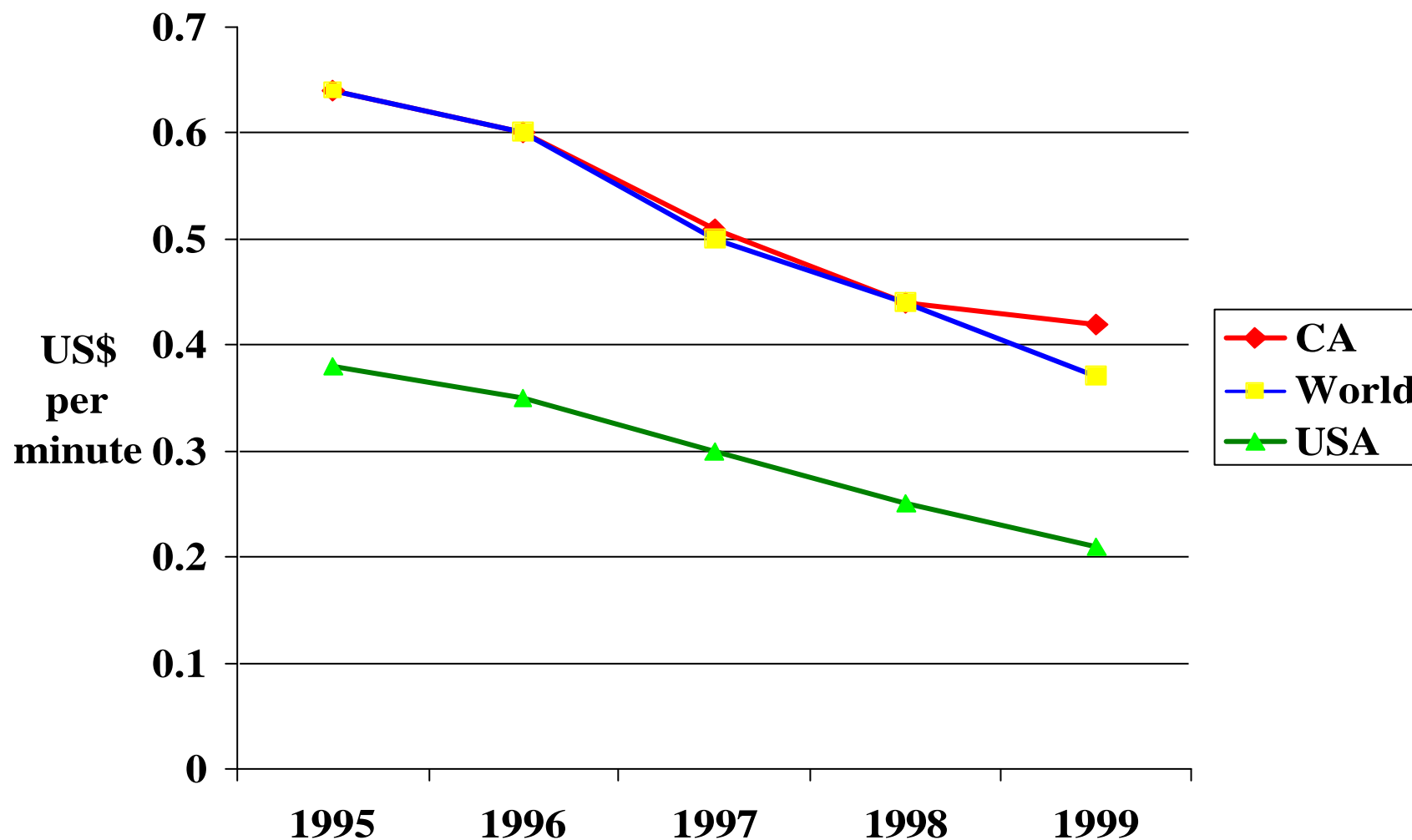




## • *Evolution of the Average Settlement Rates*

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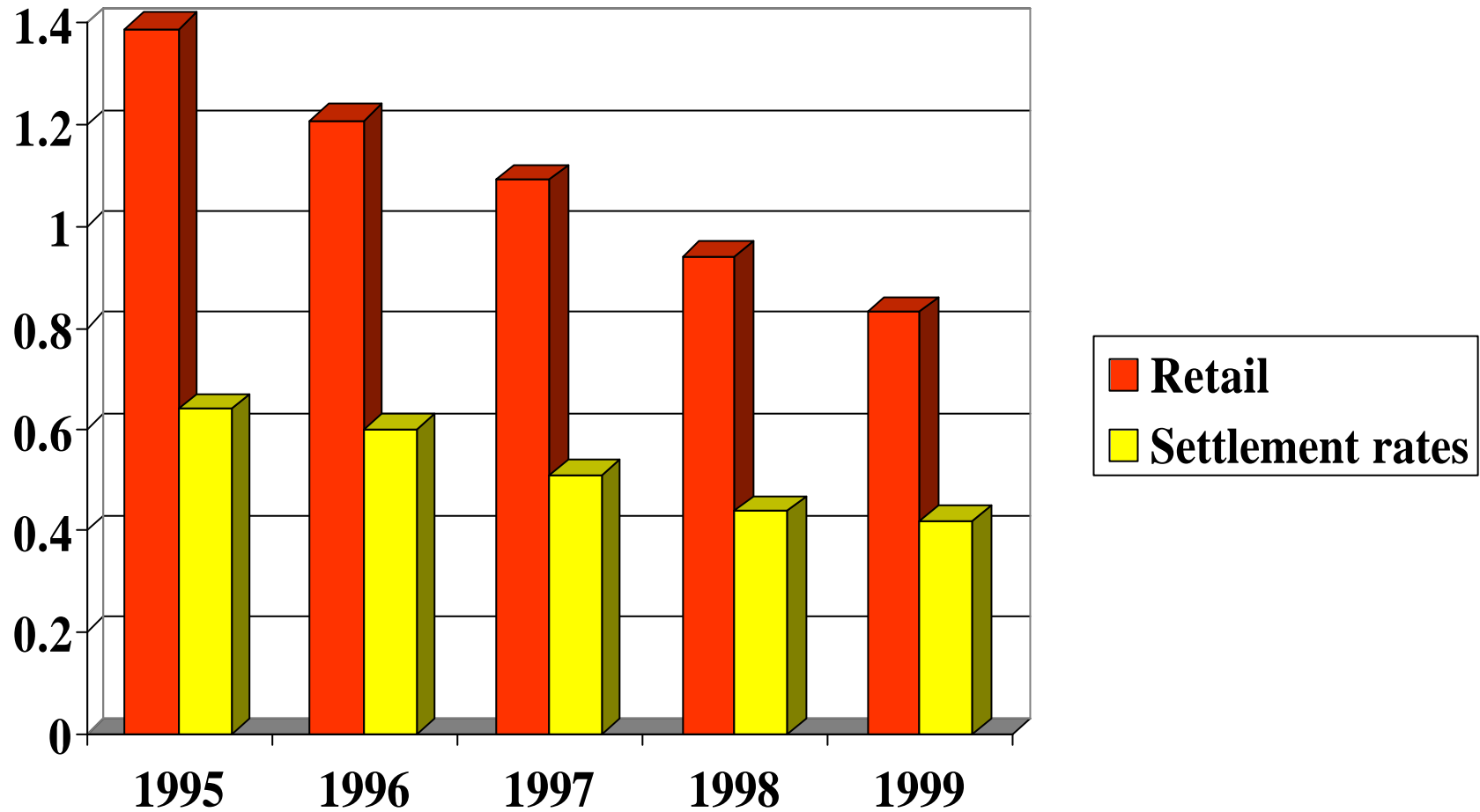




• *Settlement rates versus  
Retail prices in the CA countries*

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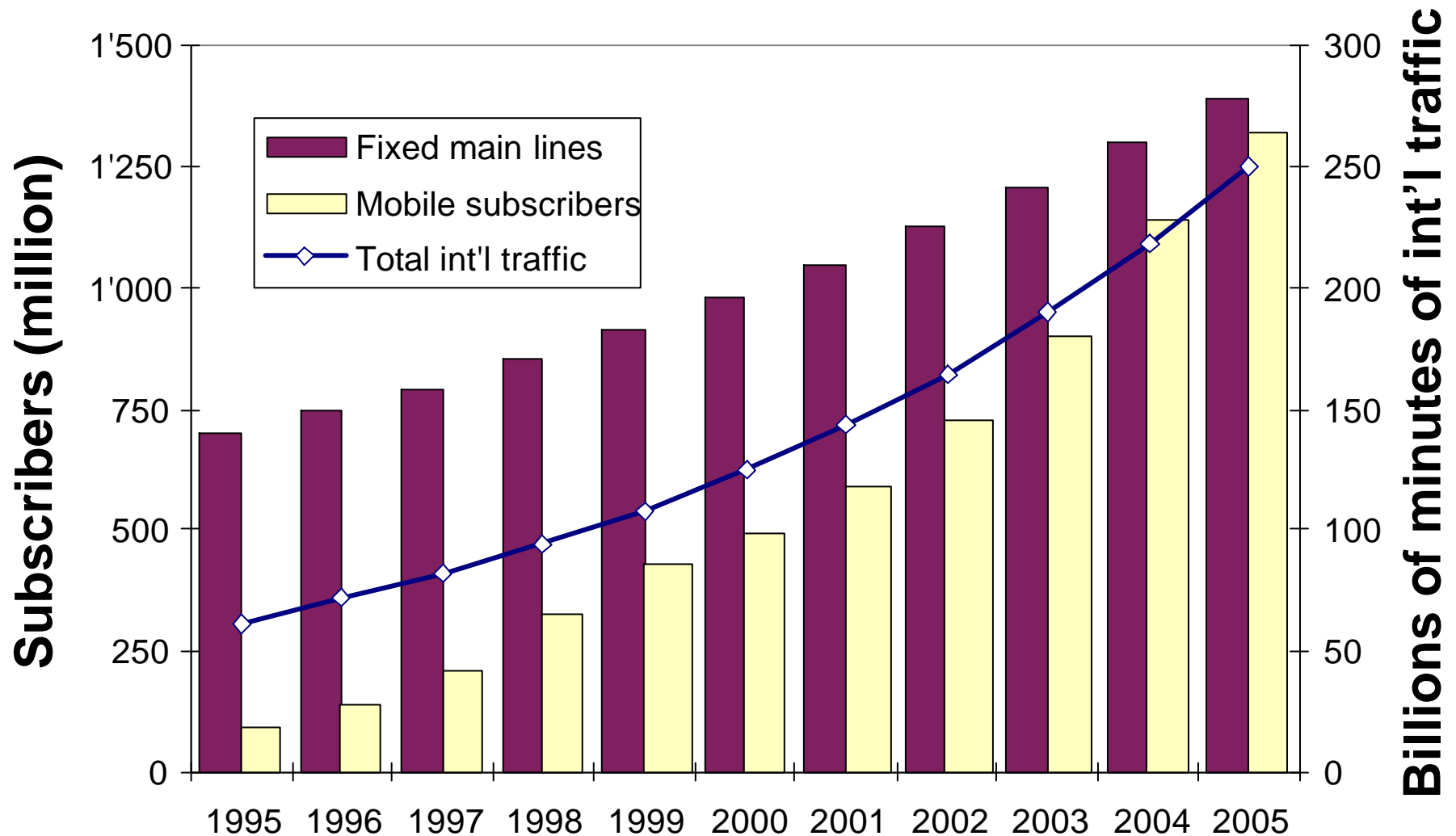




# Projection of growth trends, fixed and cellular subscribers and int'l traffic, 1995-2005

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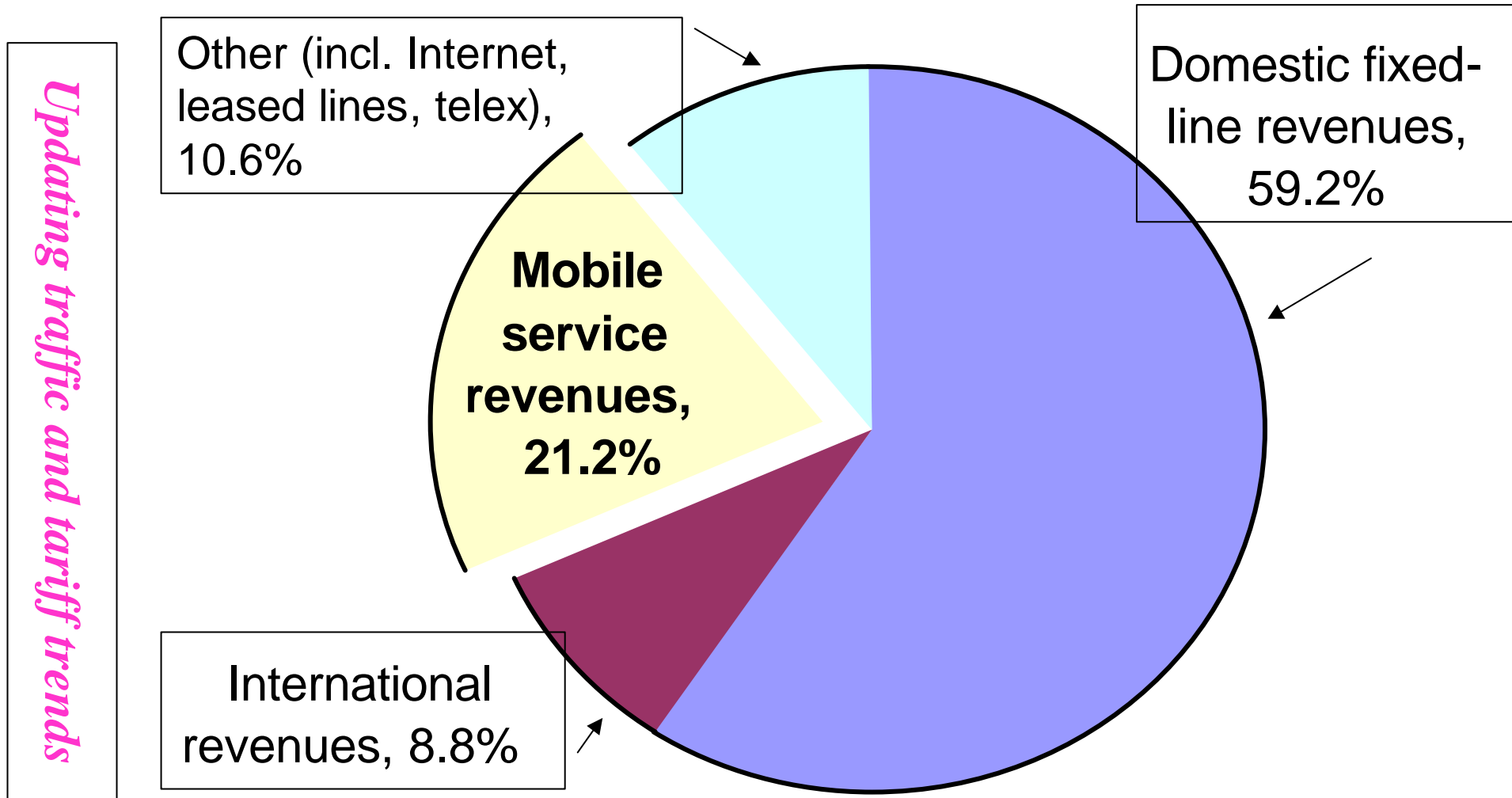


Source: ITU.



# *The changing pie:* *Global telecom service revenue, 1998*

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**1998 Telecom service revenue. Total = US\$724b**

*Source: ITU "World Telecommunication Development Report 1999: Mobile cellular" (forthcoming)*

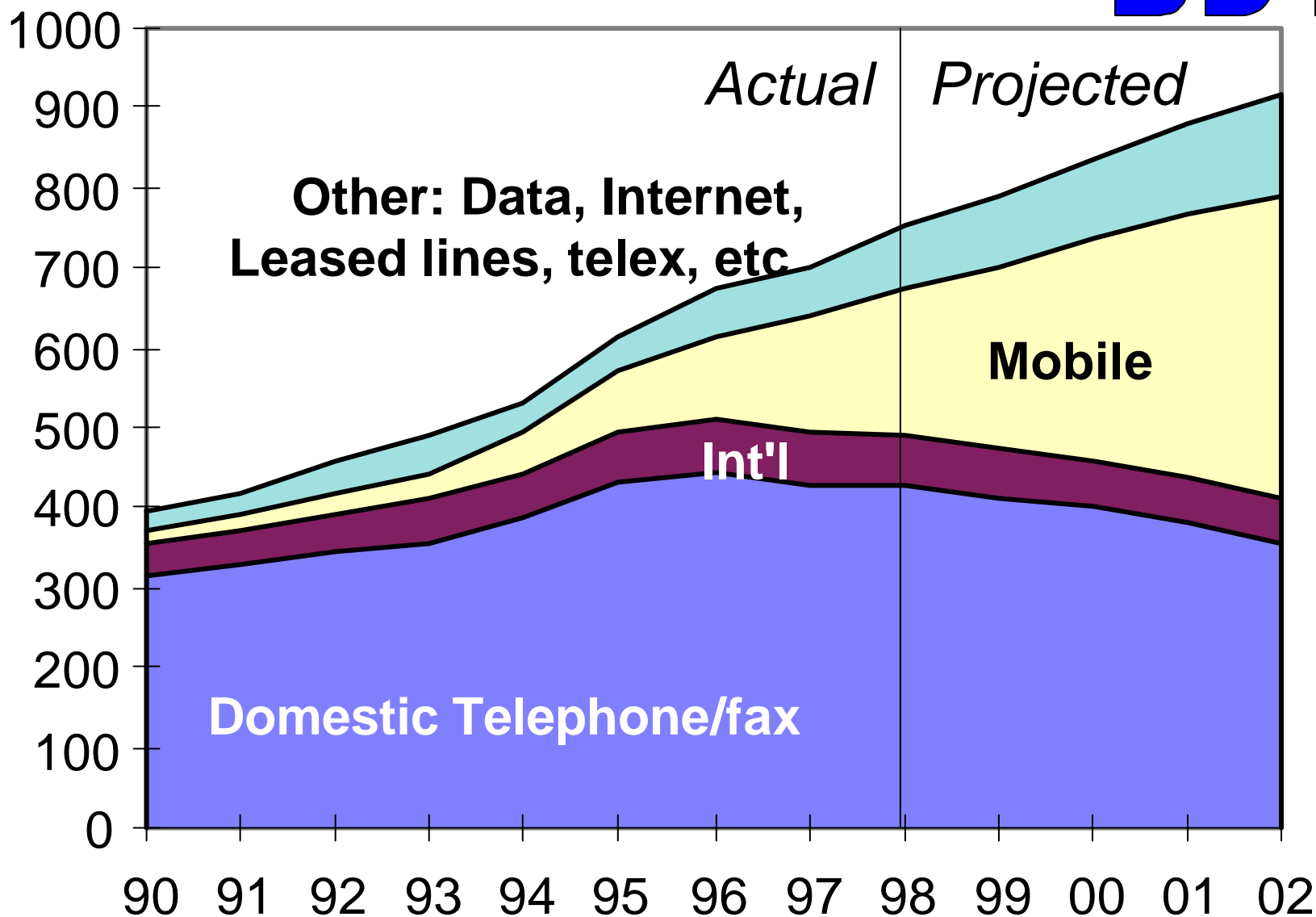


# Projection of revenue growth (US\$bn)

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Service revenue (US\$ bn)



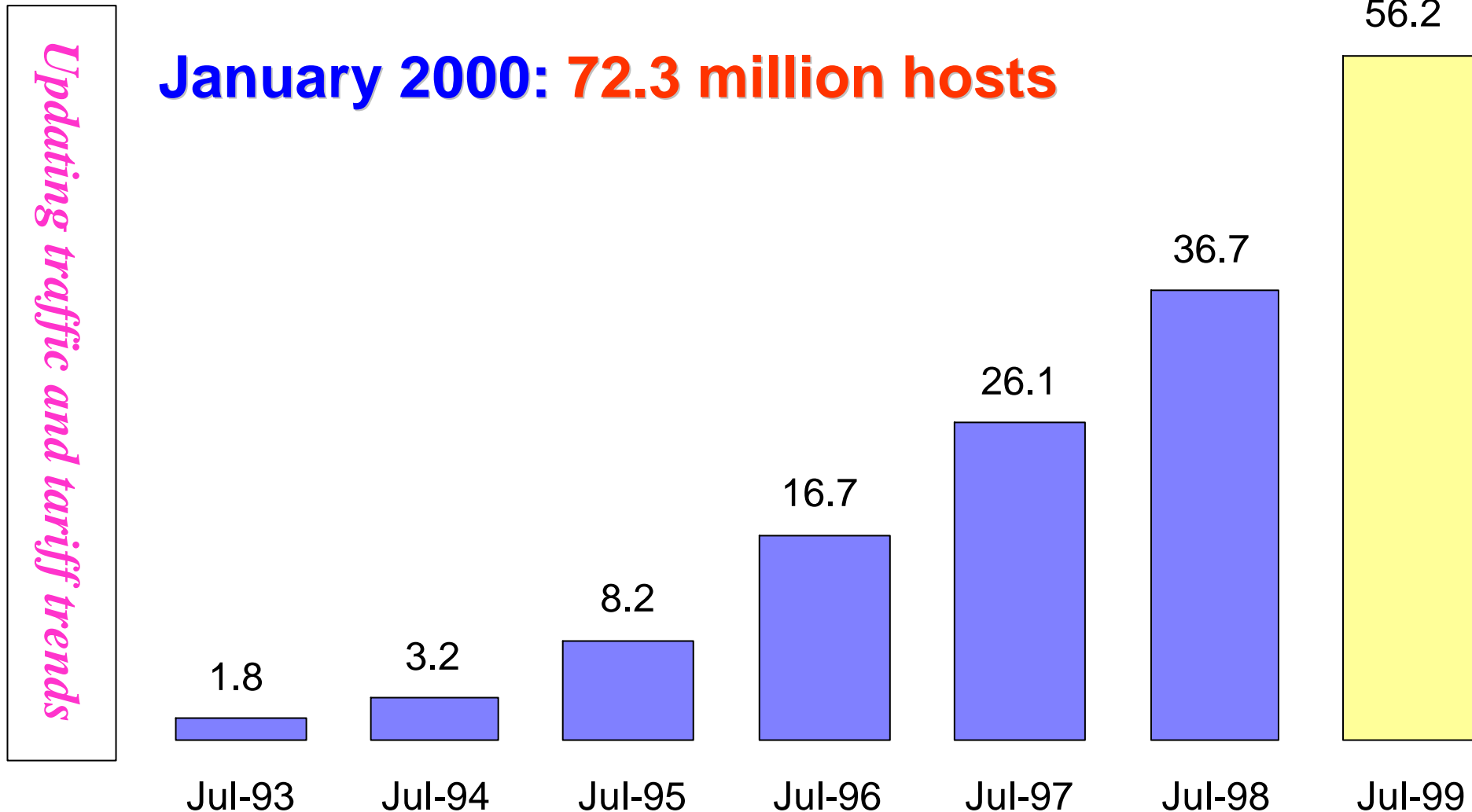
Source: ITU.



# *Internet hosts (million)* *July 1993-July 1999*

*Compound Annual Growth Rate = 61.8%*

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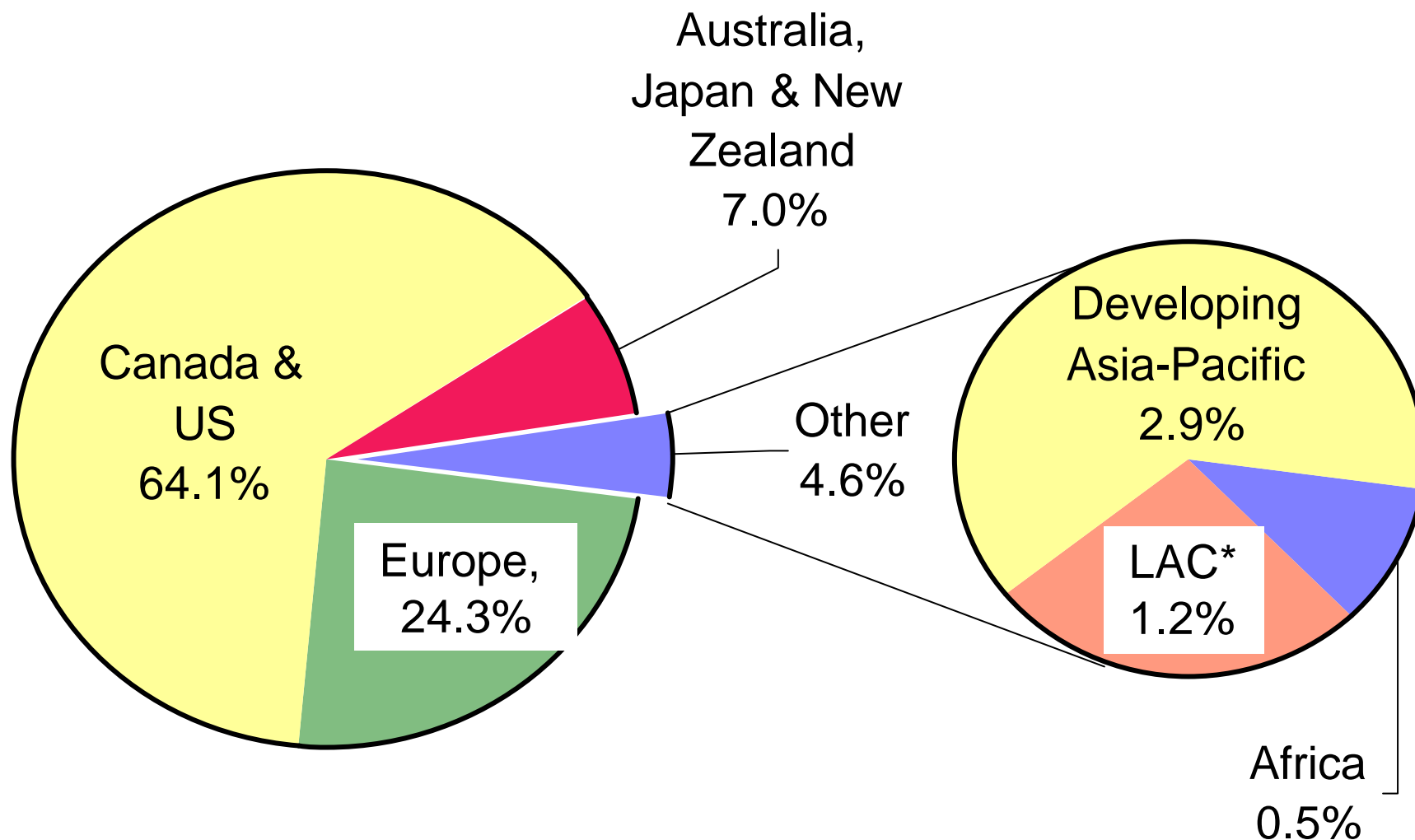
Source: ITU "Challenges to the Network: Internet for Development, 1999", Network Wizards.



## ***Distribution of Internet hosts, January 1998***

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Source: ITU "Challenges to the Network: Internet for development, 1999".



## *The state of the market*

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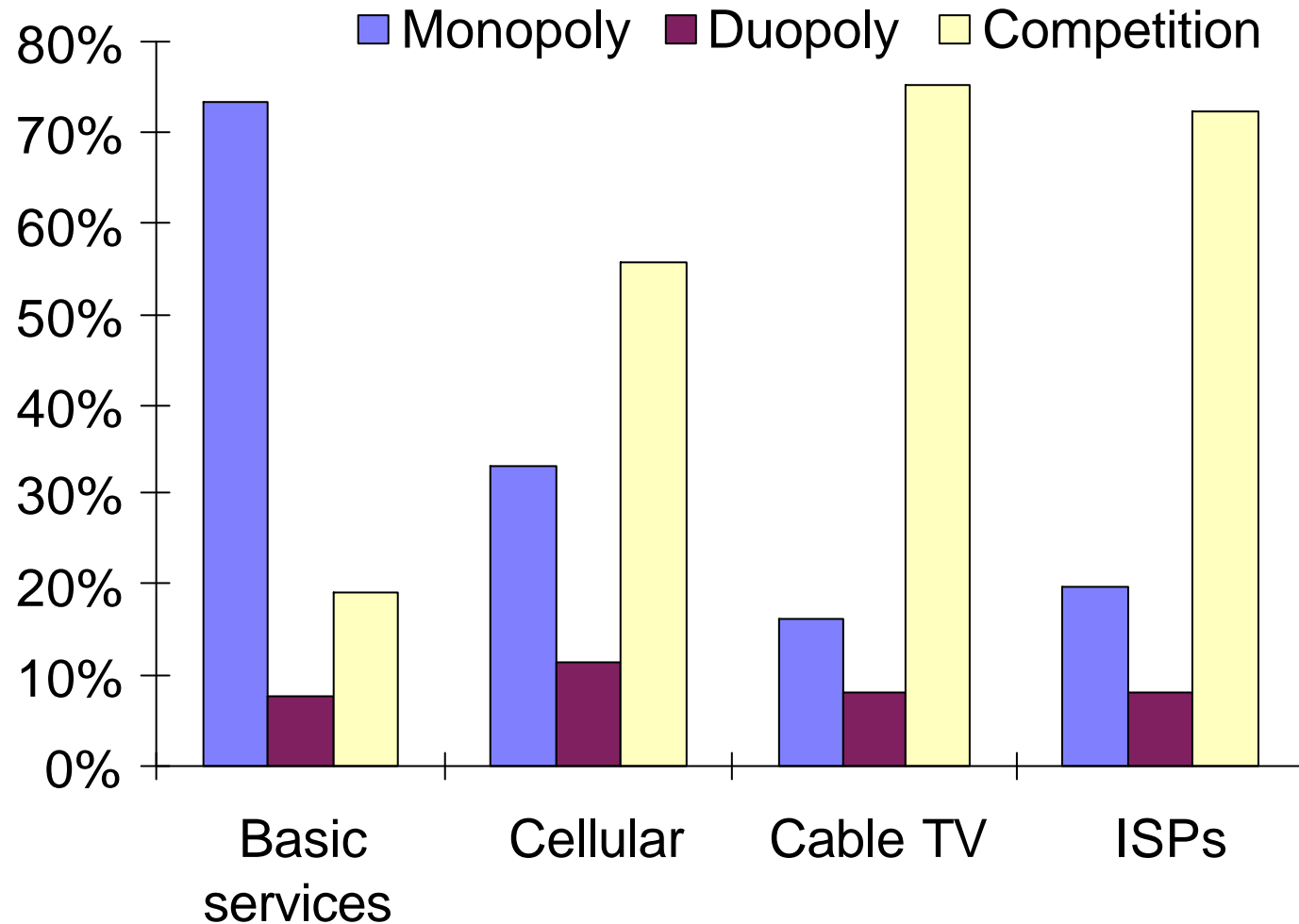
- **Increasing competition**
  - *Around two-thirds of telecom subscribers now have a choice of operator*
  - *More than 99 per cent of mobile and Internet subscribers now have a choice of operator*
- **Dominantly private-ownership**
  - *19 out of top 20 top public telecom operators are partially or fully private-owned*
  - *Of the top 20 mobile operators, 16 are fully-private, 3 are partially private, 1 is state-owned*
- **Independent regulators**
  - *There are currently 89 independent regulators (only 12 in 1990)*



## *Degree of competition by service, 1999 (ITU Member States)*

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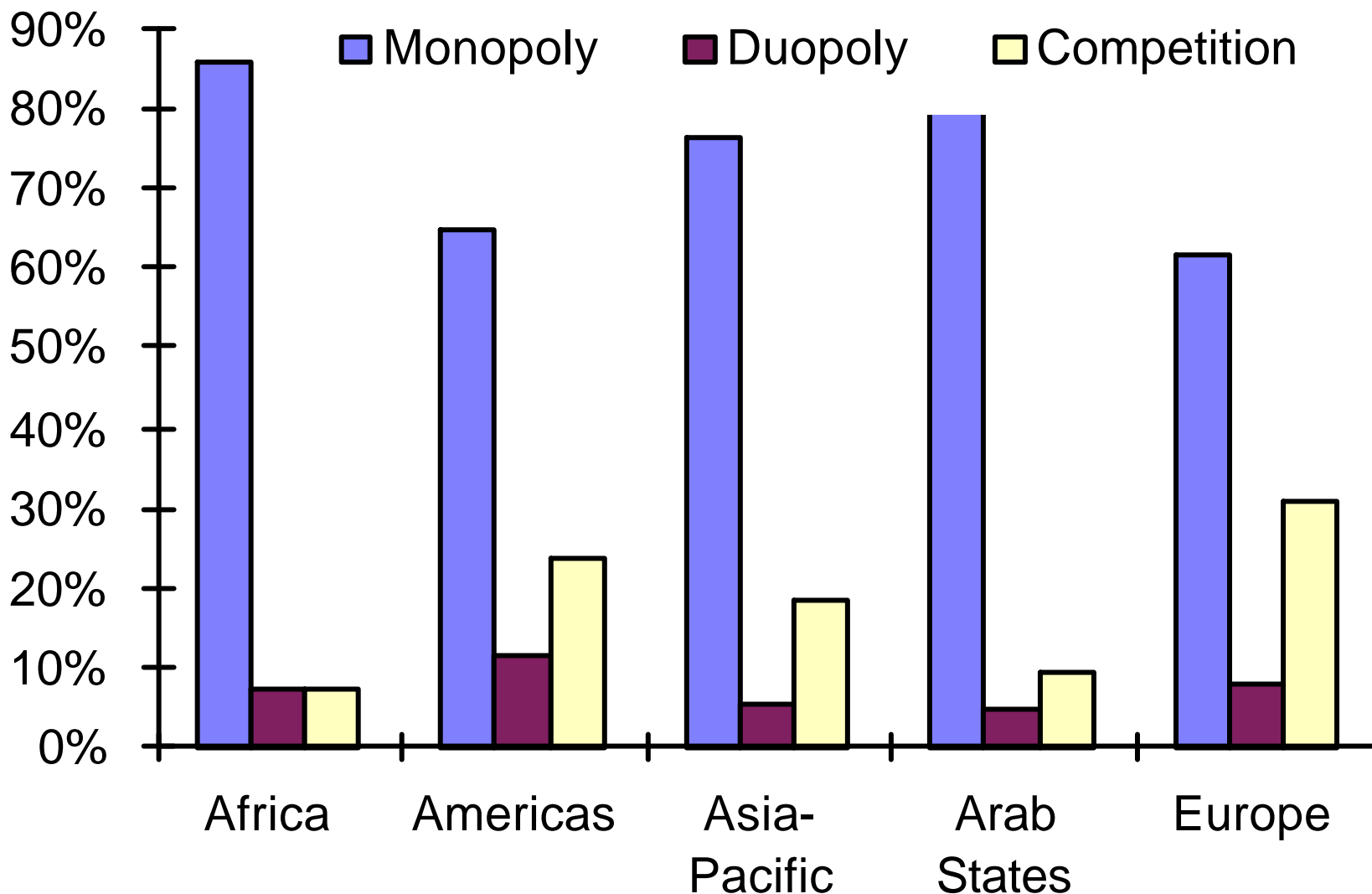
*Source: ITU Telecommunication Regulatory Database.*



## *Degree of competition in basic services, 1999, by region*

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Source: ITU Telecommunication Regulatory Database.

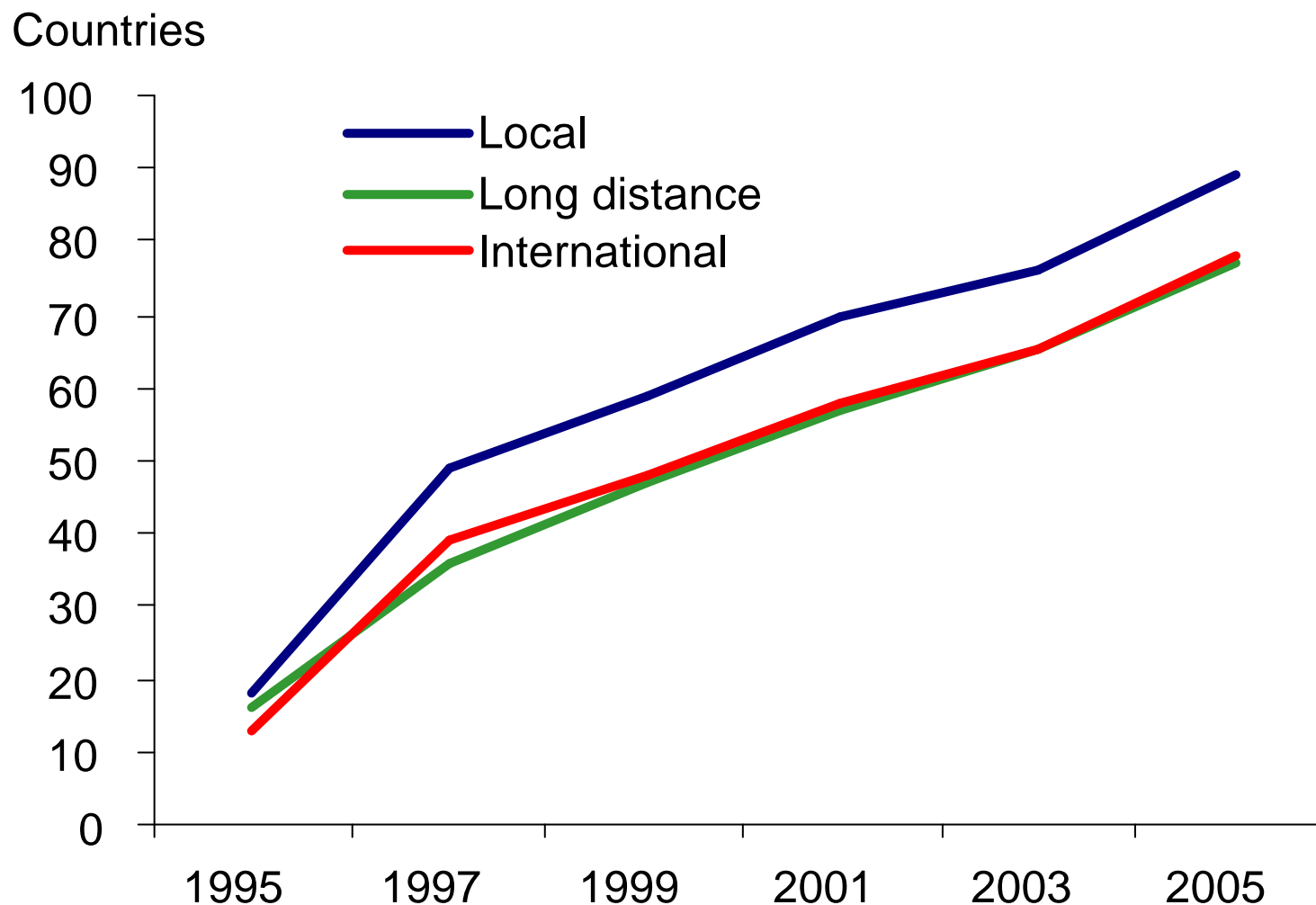


# ***Increasing competition:***

***By no. of countries, by service, 1995-2005***

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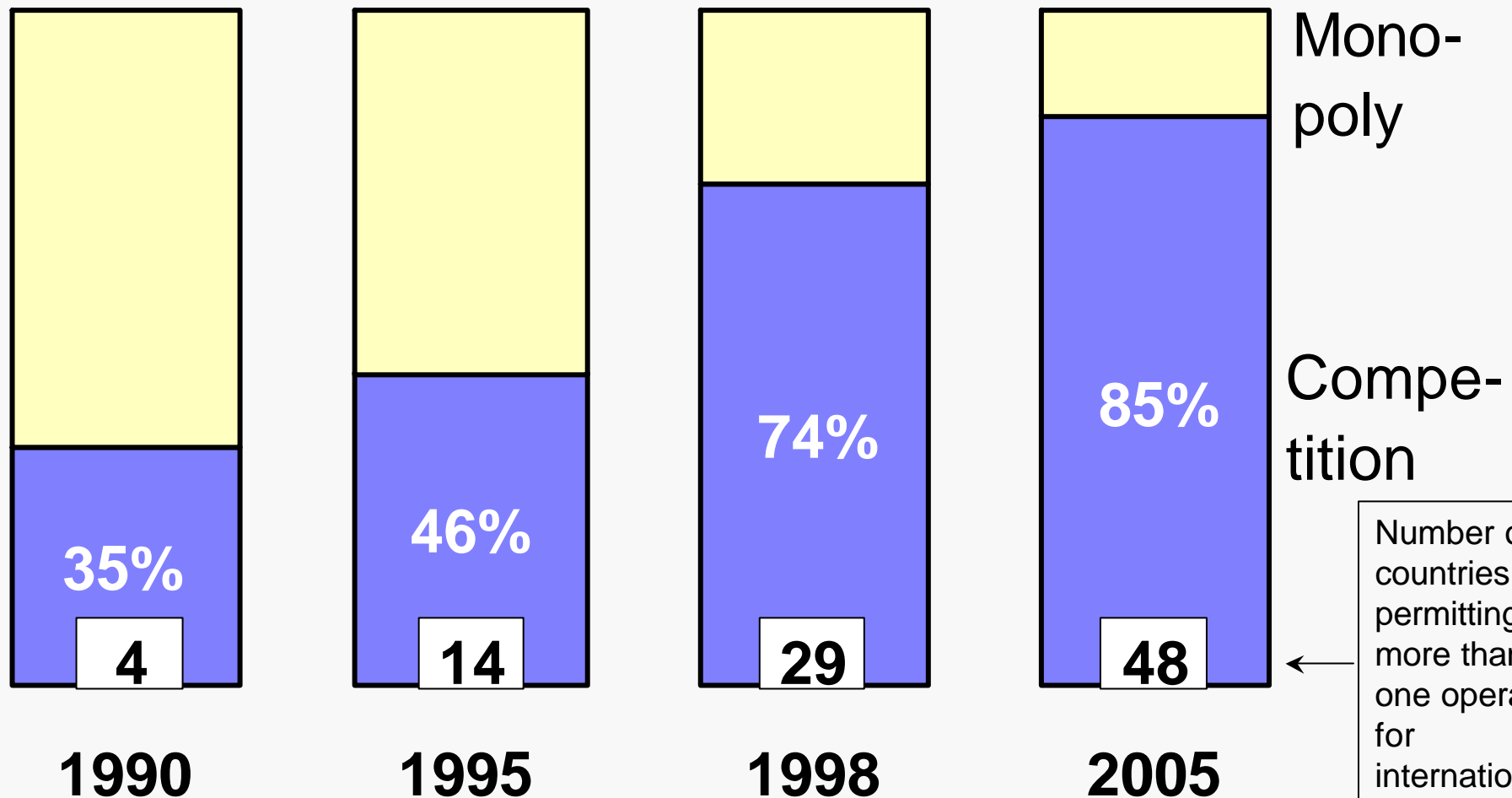


Source: ITU Telecommunication Regulatory Database.



## Percentage of outgoing international traffic open to competition

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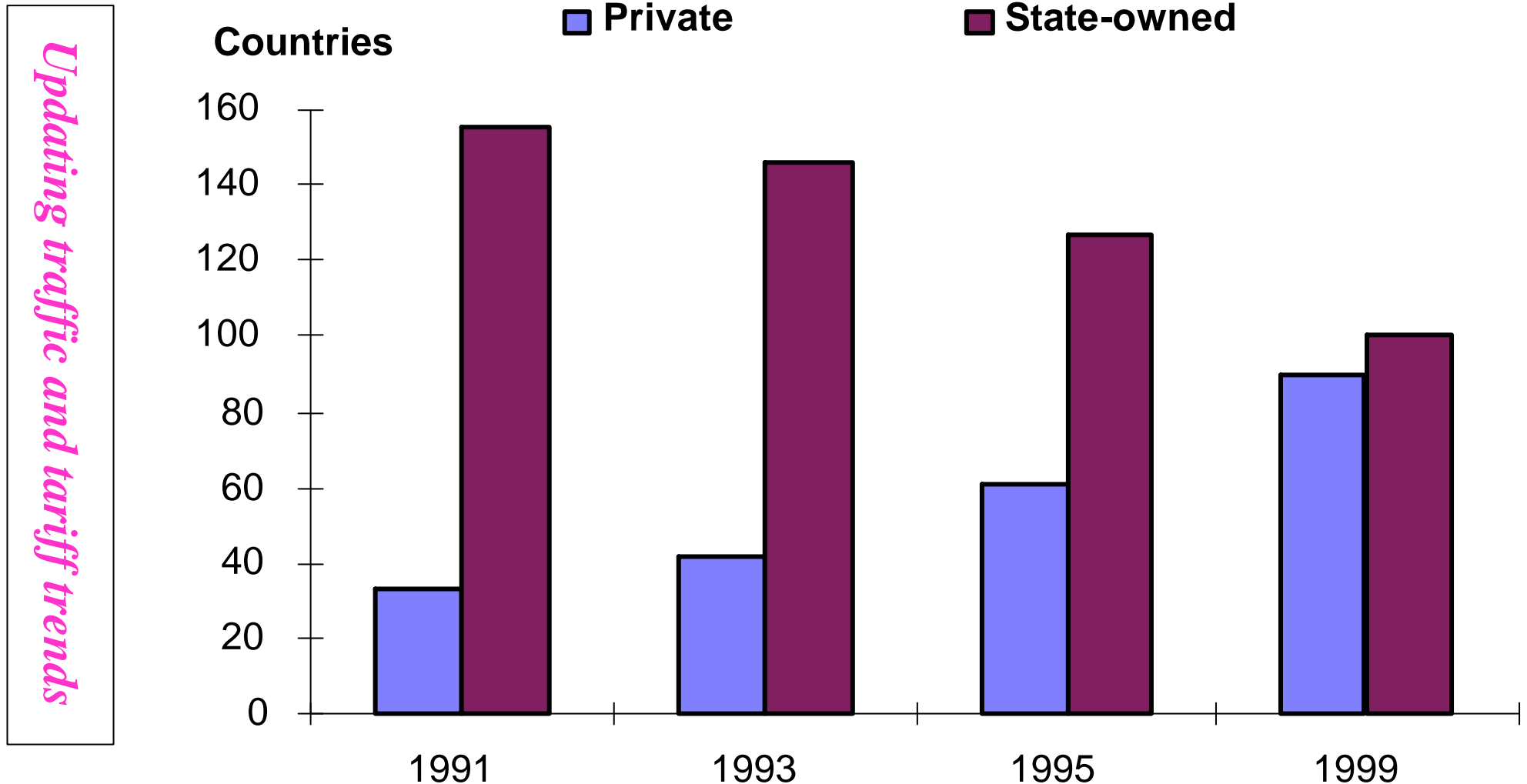


*Note:* Analysis is based on WTO Basic Telecommunications Commitments and thus presents a minimum level of traffic likely to be open to competitive service provision. *Source:* ITU, WTO.



# Ownership status of the incumbent

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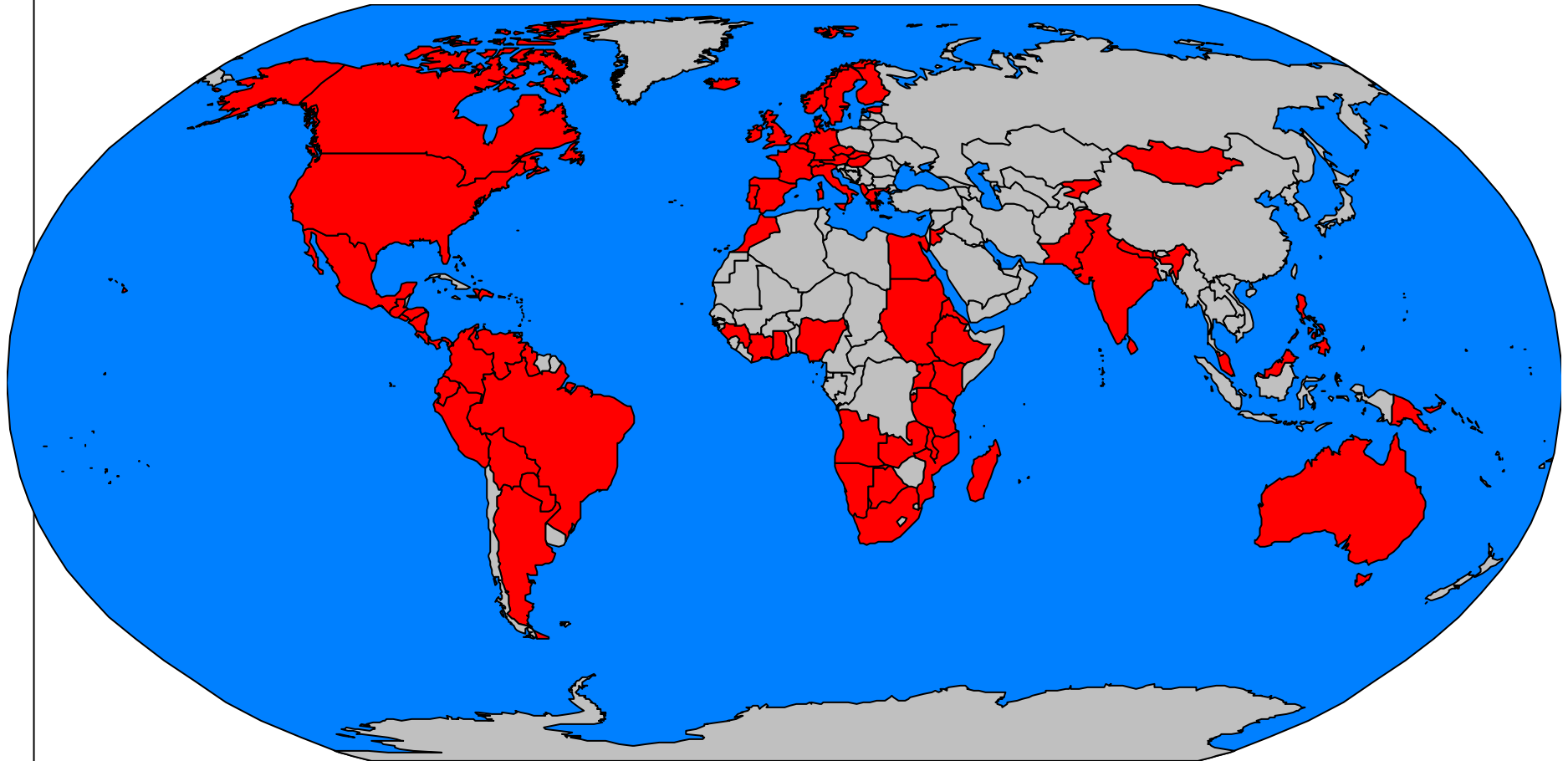


Source: ITU Telecommunication Regulatory Database.



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Source: ITU Telecom Regulatory Database.



# *The development gap is shrinking, but also shifting*

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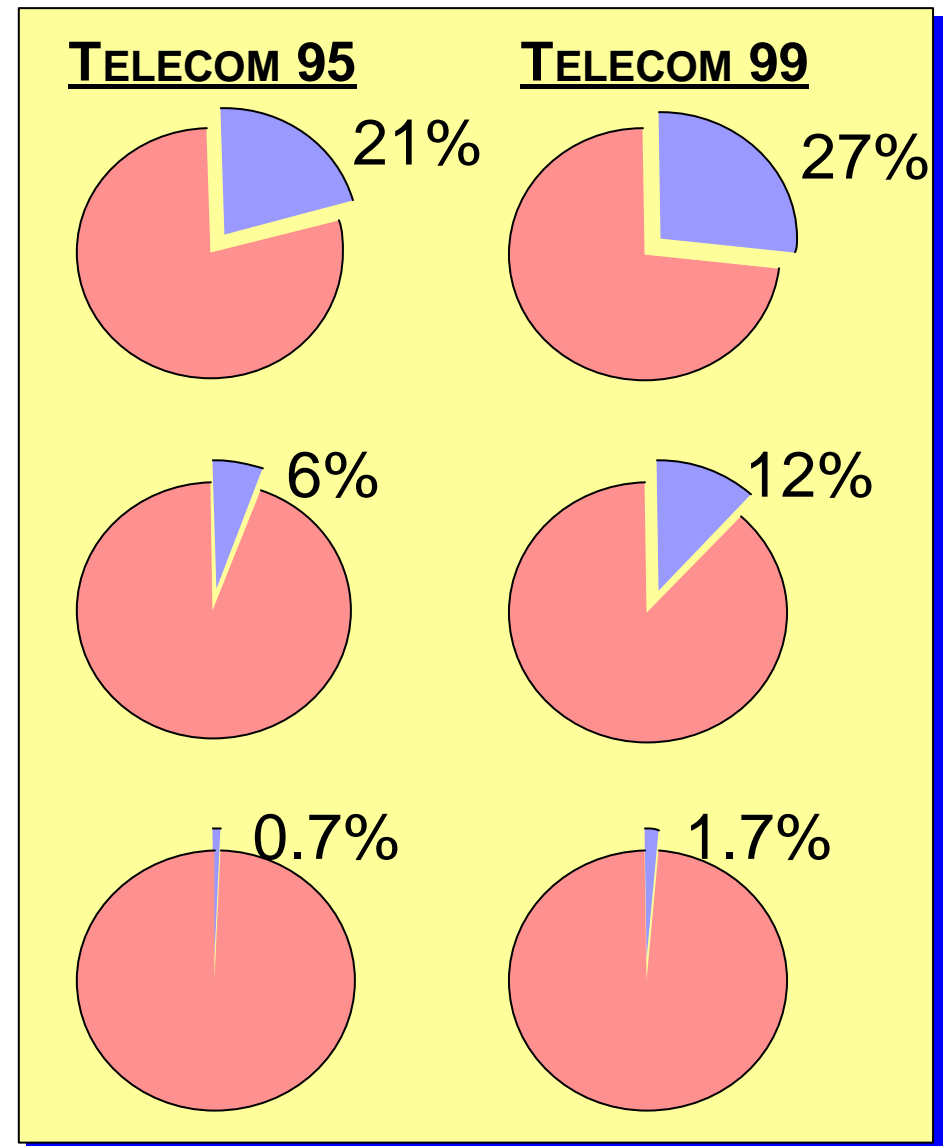
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**Share of low and lower-middle  
income countries in:**

**Telephone main lines**

**Mobile subscribers**

**Internet host computers**



Source: ITU World Telecommunication  
Indicators Database.



## Forecasting

*Projecting forward current trends*

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- **By 2005, there could be:**
  - *1.4 billion telephone lines*
  - *1.3 billion cellular telephone subscribers*
  - *500-750 million Internet users*
- **These could account for:**
  - *250 billion minutes of int'l voice/fax traffic*
  - *2.5 trillion minutes of total voice/fax traffic*
  - *1'000'000 Gigabits (1 Petabit) per second of Internet traffic*
  - *Services market of around US\$1.1 trillion*
  - *Equipment market of around US\$400 billion*



## **Forecasting** **Identifying discontinuities**

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- By 2001, less than 10% of int'l traffic will use accounting rate system
  - *Domestic interconnect fees will be dominant mode*
- Major price cuts in international calls early in decade
  - *Availability of new infrastructures*
  - *Impact of Internet pricing model (distance and duration independent)*
- Mobiles exceed fixed-line phones worldwide by 2006/07
  - *Introduction of “third generation” mobiles after 2001*
  - *Generational shift, as new users reject fixed-lines*



## *The int'l telecoms market in 2005:* *Some educated guesses*

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- The premium of an international call over a domestic call (currently  $>300\%$ ) will be  $<20\%$ 
  - *Internet-like pricing structure*
- Traffic flows will be dictated by a small number of hubs connected to multiple fat pipes
  - *Major hubs in New York, London and Hong Kong?*
- Major alliances will own a smaller share of the market as infrastructure owners resell capacity
  - *Market significantly bigger by volume, but only slightly bigger by revenue*
- Telecom development gap will shift
  - *Gap between middle income countries and LDCs*



## Key policy issues to be tackled

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- Interconnection
  - *How to manage the transition to a multi-player environment?*
- Internet
  - *Who really sets the rules? Who really gets benefits?*
- International settlements
  - *How to transition to a cost-oriented system while providing a “soft-landing” for developing countries?*
- International infrastructures
  - *How to ensure equal access at competitive rates?*
- Investment
  - *How to increase investment, esp in LDCs?*