ROAD TRANSPORT COSTS IN VIETNAM AND SOME OTHER COUNTRIES

by TRẦN VĂN HÙNG

A research carried out by the French INRETS (National Research Institute of Transport and Transport Safety) at the beginning of 1996 in cooperation with the HUE Faculty of Economics has provided data needed for the following analyses.

1. Relationship between transport costs and load

A survey of 444 lorry-loads shows that the bigger the loads, the lower the costs. This inverse relation between transport costs and load size in Vietnam could be seen in the following graph.

Transport costs in VNĐ per tonne-km (referred to as PXTK) are noted down on the vertical axis, and load sizes expressed in terms of neperian logarithm of tonne-km (referred to as LTKM) are noted down on the horizontal axis. Points in the graph show the relation between PXTK and LTKM of 444 lorry-loads transported.

We can also verify the inverse relation between PXTK and LTKM by another way: to arrange 444 transported loads into 7 groups according to their sizes (tonne-km), to average out PXTK of each group, and draw the line expressing the relation between PXTK and LTKM.

Size (TOKM) tonne-km)	Average PXTK (VNĐ)	Difference	Average LTKM	Difference
0-200	2371.39	1438.40	4.68	0.50
201-500	1282.72	543.31	5.82	0.26
501-1000	884.53	420.46	6.63	0.19
1001-2000	613.99	254.71	7.30	0.19
2001-4000	480.99	181.97	8.05	0.19
4001-6000	379.97	122.97	8.49	0.11
Over 6000	394.68	167.12	9.54	1.10

The inverse relation between average PXTK and average LTKM is showed in the following graph.

The graph 2 is an illustration of statistical relation presented in the Graph 1.

If we express sizes of transported loads in Log of load-km (referred to as Log VOKM) and transport costs in VNĐ/load-km (as PXVK) results gathered from a survey of 606 transported loads which were arranged into 6 groups according to their sizes also show the inverse relation between average PXVK and average Log VOKM as depicted in the following Graph 3:

Size (VOKM) (load/km)	Average PXVK (VNĐ)	Difference	Average Log VOKM
0-40	13,253.16	12,043.19	1.47
41-100	7,090.59	3,528.71	1.85
101-200	5,513.37	2,816.13	2.16
201-500	4,249.73	1,850.44	2.54
501-800	2,918.81	1,278.00	2.82
Over 800	4,807.90	7,680.33	3.66

In all three graphs, we see that in transported loads of very large amounts the transport costs are in direct proportion to the sizes of transported load.

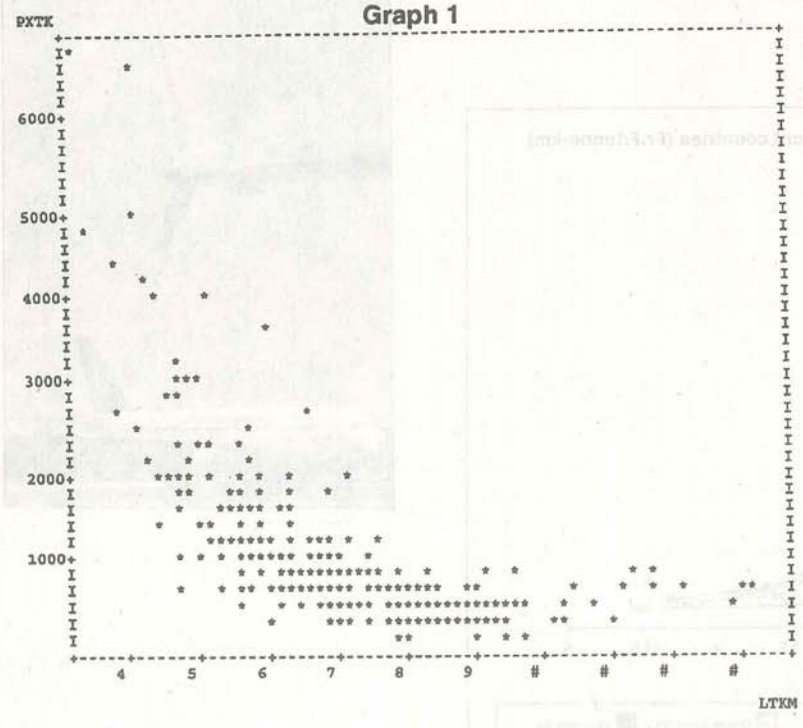
2. Transport costs in Vietnam and some other countries

It's worth noting that in different countries, the relation between transport costs and loads has almost the same feature, because different surveys carried out in other countries produced the same results (see the Graph 4 where PXTK is expressed in French Franc/tonne-km, and Log TOKM in Log tonne-km of loads)

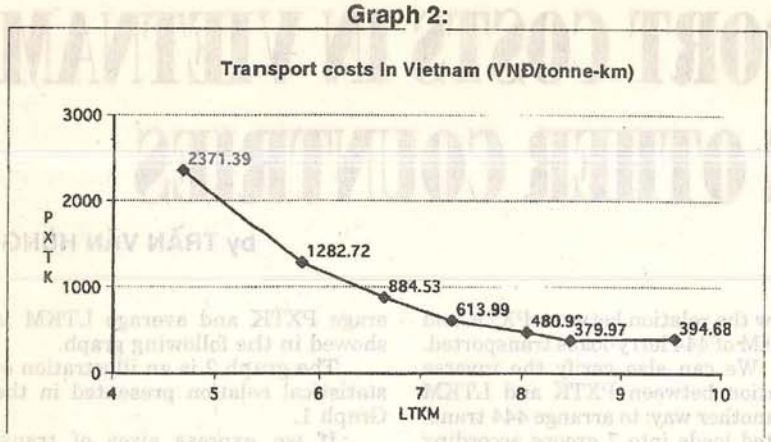
The Graph 4 shows that of 4 countries surveyed, Vietnam has the lowest transport costs. Naturally, it is a comparative advantage in competition, however, surveys have been carried out in only a few countries.

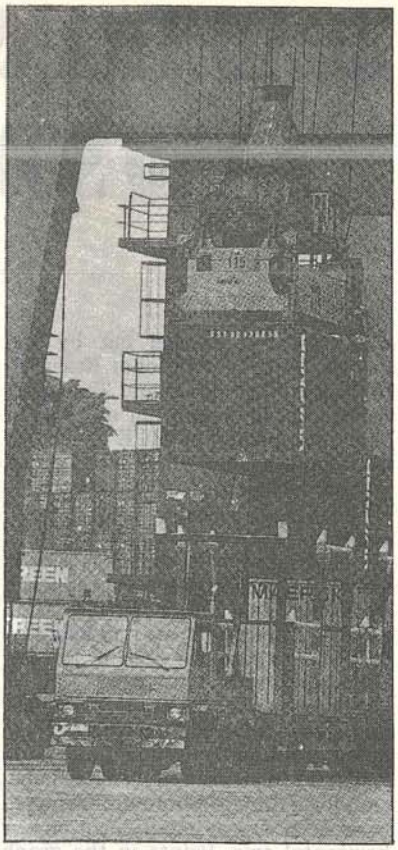
The cause of Vietnam's low transport costs in comparison with other countries surveyed haven't been studied carefully but we can see that low petrol prices and low wage are acceptable explanations■

Graph 1

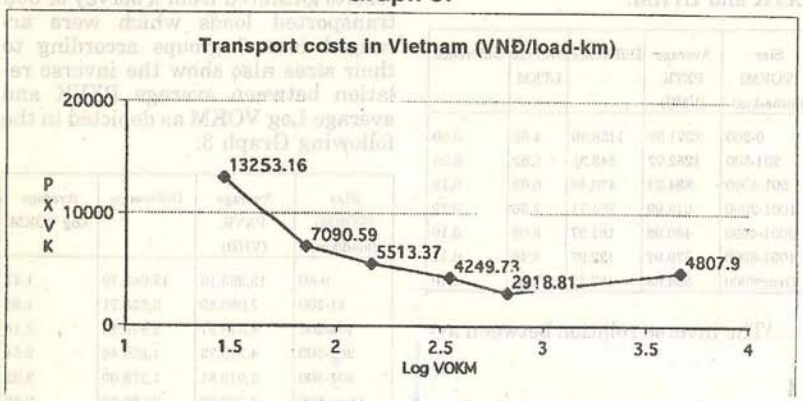
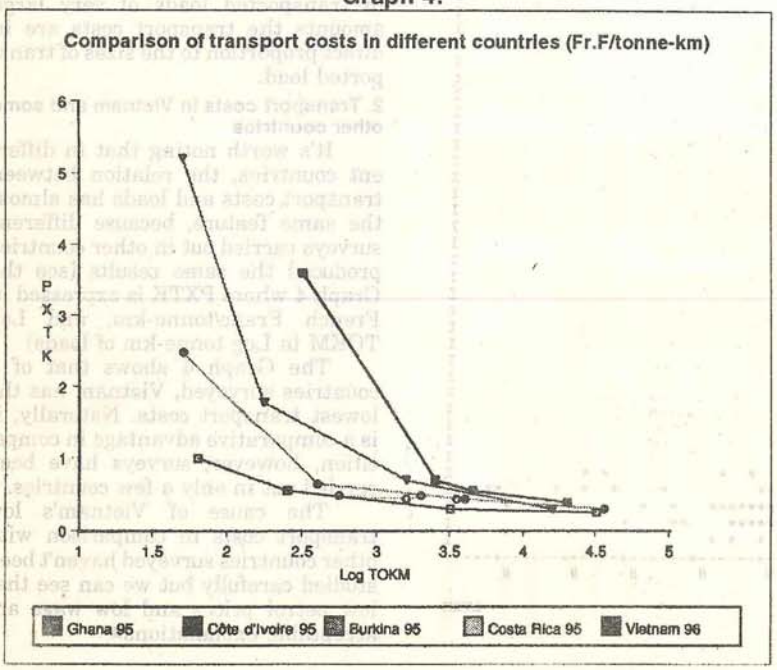


Graph 2:





Graph 3:



Graph 4: