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# Managed care, deficit financing, and aggregate health care expenditure in the United States: A cointegration analysis

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### **Abstract**

We applied a battery of cointegration tests comprising those of Johansen and Juselius [19], Phillips and Hansen [35], and Engle and Granger [6], to model aggregate health care expenditure using 1960-96 US data. The existence of a stable long-run economic relationship or cointegration is confirmed, in the United States, between aggregate health care expenditure and real GDP, population age distribution, managed care enrollment, number of practicing physicians, and government deficits. The evidence of cointegration among these variables, chosen on the theoretical basis of prior studies, implies that while they are individually non-stationary in levels, together they are highly correlated and move, in the long run to form an economic equilibrium relationship of US aggregate health care expenditure. More specifically, and for the first time in this line of inquiry, (i)

managed care enrollment is found to be negatively associated with the level of health care spending, (ii) supply disinduced demand effects of physicians tend to moderate health expenditure, and (iii) government deficit financing is positively related to health care spending. The observed sign and magnitude of the income coefficient are consistent with health care being a luxury good.



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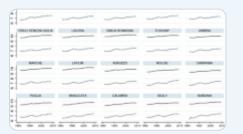
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