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Impact of the *Annales* School on Ottoman Studies and New Findings

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"A major historiographical problem, a zone of formidable uncertainty: the Ottoman Empire"

F. Braudel, *The Mediterranean*, I, 13.

In the late ninteenth century French social thought, and positivism in particular, had a strong impact on the minds of the Young Turks in exile in Paris, who sought an intellectual foundation upon which to base their program for the reformation of the Ottoman Empire.[1] Ziya Gökalp,[2] the first to hold the chair of sociology in the University of Istanbul (1915) and an able follower of Emile Durkheim, was directly indebted to this group for his intellectual development. The spreading influence of French sociology was further consolidated under Gökalp's disciple, Mehmed Fuad Köprülü,[3] the founder of modern Turcology

1. Şerif Mardin, *Jön Türklerin Siyasi Fikirleri: 1895-1908* (Ankara: T.İş Bankası Kültür Yayınları, 1964). Ş. Mardin, *Continuity and Change in the Ideas of the Young Turks* (Ankara: School of Business Administration and Economics, Robert College, Istanbul, 1969).

2. Halil İnalcık, "Ziya Gökalp," *International Encyclopedia of the Social Sciences*, VI, 1968, 194-96.

3. On Köprülü see *Fuad Köprülü Armağanı*, *Mélanges Fuad Köprülü* (İstanbul: Univ. of Ankara, DTC Fakültesi, 1953) and H. İnalcık, "Türk İlmi ve Fuad Köprülü," *Türk Kültürü*, VI, 65, 1968, 289-94.

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in Turkey. In the intensely nationalistic mood of the early years of the Turkish Republic, Köprülü focused his studies on the cultural roots of the Turkish nation. After 1930, his interest in the work of Lucien Febvre and *Annales* became increasingly evident in both his methodology and his mode of conceptualization. In 1931, he published the first scholarly journal on Turkish legal and economic history, *Türk Hukuk ve İktisat Tarihi Mecmuası*. At the same time a group of young scholars studied with him, among whom were Abdülbaki Gölpınarlı, Osman Turan, Mehmet Altay Köymen, Faruk Sümer, and Mustafa Akdağ. As one of his students, I am greatly indebted to Köprülü for my orientation towards institutional, social and economic history.

Thus, Durkheim's sociology, intimately associated with the movement for reform and social change, wielded a dominating influence on social and historical studies from the beginning of the Republican period. It was, however, not until after the Second World War that any great progress was made in the study of the social and economic history of the Ottomans. This development was due largely to the great upsurge in interest in contemporary socio-economic problems, and was facilitated by the fact that the archives were then made ready for study. It was not mere coincidence that the initial studies of Ömer Lûtfi Barkan, which dealt with land reforms in various Balkan countries[4] emphasizing their Ottoman background, came at a time when a land reform project with far-reaching social implications was under discussion in the Turkish parliament. It is to Barkan, a graduate of the University of Strasbourg and a colleague of Fuad Köprülü, that we owe the most original works in the postwar period on the demographic, social, and economic history of the Empire, all of these are based exclusively on archival materials.

During the past thirty years there has been tremendous progress in research on the socio-economic structure of the Empire, both inside and outside Turkey. The publication of Fernand Braudel's *La Méditerranée*,[5] which clearly defined the issues and offered suggestions of seminal importance, has been the most significant milestone in this period. One of the major contributions of Braudel's work, not only to Ottoman studies but also to general historiography, was, I believe, his rediscovery of the historical place of the Ottoman Empire. Previously it had been treated as no more than an intruder, a constant disruptor of the normal course of European events. Viewing events and developments in their long-term significance, Braudel was able to demonstrate, courageously, and in the face of numerous biases, that the Ottoman Empire was an integral part of the Mediterranean world, participating in its general development. The history of the Mediterranean in the sixteenth century, he showed, cannot be properly evaluated without acknowledging the significance of the Empire of the Ottomans, whose capital city was the largest city in Europe, whose Levantine trade competed with the growing Atlantic economy, and whose military ventures gave occasion to such unprecedented events as Lepanto. To illustrate accurately the influence of the *Annales* School, or more exactly that of Braudel, upon Ottoman

4. "Balkan Memleketlerinin Ziraî Reform Tecrübeleri," *İktisat Fakültesi Mecmuası*, IV, 4, 1944, 455-554. Some copies of this review do not contain the *Introduction* with the interesting remarks on current political issues.

5. The first edition was published in Paris in 1949.

studies during the last two decades, I thought it best to discuss some specific points raised in *La Méditerranée*, which, in my opinion, gave a new orientation to those studies. In this paper I intend to review new research, and add my comments on the problems of population change and its relation to the economy, and the concomitant topic of Ottoman production and trade with Europe, and the monetary impact this trade had on the Ottoman Empire.

I. Problems of Ottoman Demography

"Le nombre partage, organise le monde."

F. Braudel, *Civilisation matérielle et capitalisme*, 68.

Population Problems Associated with the Foundation of the Ottoman State

Ömer Lûtfi Barkan is undoubtedly the pioneering scholar of Ottoman demography. The results of his extensive and still unfinished research were published in the form of short articles.[6] These were available to Fernand Braudel only after the initial publication of *La Méditerranée*, but he was able to consult them in the preparation of the second edition of his work.[7]

Barkan's studies cover a wide range of Ottoman demographic history, starting with the role played by the dervish convents (*zâviye*) in the process of the expansion and settlement of Turkish population in the frontier zone during the foundation of the Ottoman state, a subject upon which attention was focused following Fuad Köprülü's studies.[8] Referring mainly to R. Busch-Zantner's summary of the subject,[9] Braudel stated that "the Ottoman success was intimately

6. Ö. L. Barkan's publications on Ottoman demography: "Türkiye'de İmparatorluk Devirlerinin Büyük nüfus ve Arazi Tahrirleri ve Hakâna Mahsus İstatistik Defterleri," *İktisat Fakültesi Mecmuası*, II, 1, 1940, 20-59; II, 2, 1941, 214-47. "Osmanlı İmparatorluğunda bir İskân ve Kolonizasyon Metodu Olarak Vakıflar ve Temlikler," *Vakıflar Dergisi*, II, 1942, 279-386. "Osmanlı İmparatorluğunda bir İskân ve Kolonizasyon Metodu Olarak Sürgünler," *İktisat Fakültesi Mecmuası*, XI, 1949/50, 52-69; XIII, 1951/52, 56-78; XV, 1953/54, 209-37. "Tarihî Demografi Araştırmaları ve Osmanlı Tarihi," *Türkiyat Mecmuası*, X, 1951/53, 1-26. "Essai sur les données statistiques des régistres de recensement dans l'Empire Ottoman aux XVe et XVIe siècles," *Journal of Economic and Social History of the Orient*, I, 1, 1958, 9-36. "Research on the Ottoman Fiscal Surveys," in M. Cook, ed., *Studies in the Economic History of the Middle East* (London: Oxford University Press, 1970), 163-71. "894 (1488/1489) yılı Cizyesinin Tahsilatına ait Muhasebe Bilançoları," *Belgeler*, I, 1, 1964, 1-117.

7. *La Méditerranée et le monde Méditerranéen à l'époque de Philippe II* (Paris: Lib. Armand Colin, 1966); English translation by S. Reynolds, *The Mediterranean and the Mediterranean World in the Age of Philip II* (New York: Harper and Row, 1972).

8. "Abu Ishāq Kāzerunī und Ishāqī Derwische in Anatolien," *Der Islam*, XIX, 1930/31, 18-25; and *Les origines de l'Empire Ottoman* (Paris: E. de Boccard, 1935). F. Köprülü, "Abdal," *Türk Halk Edebiyatı Ansiklopedisi*, I, 1934.

9. Richard Busch-Zantner, *Agrarverfassung, Gesellschaft und Siedlung in Südosteuropa, unter besonderer Berüksichtung der Türkei*, Beihefte zur "Leipziger Vierteljahrsschrift für Südosteuropa," III (Leipzig: O. Harrassowitz, 1938). On Turkish expansion and settlement in this period see Faruk Sümer, *Oğuzlar (Türkmenler), Tarihleri, Boy Teşkilatı, Destanları* (Ankara: Ankara Üniversitersi, DTC Fakültesi, 1967); F. Sümer, "Anadolu'da Moğollar," *Selçuklu Araştırmaları Dergisi*, I, 1969, 1-147; Speros Vryonis, *The Decline of Medieval Hellenism in Asia Minor and the Process of Islamization from the Eleventh through the Fifteenth Century* (Berkeley: University of California Press, 1971).

connected with the waves of invasion, of silent invasion, which drive the peoples of Turkestan westwards . . . and also with the extraordinary propaganda of the Muslim orders." The population pressure in the frontier zone, noticed by contemporary Byzantine sources,[10] seems to be the basic phenomenon in this development. It was the result of the concentration in the area of mobile Turcoman tribes, pushed forward in the second half of the thirteenth century by the Mongols and attracted by the prizes ensuing from successful raids into "infidel" lands. This massive population movement brought with it into the area a stream of settled population and discontented political leaders, and resulted in the transformation of Asia Minor west of the Kızılırmak (Halys) river into a new Turkey. Toward 1330, Al-'Umarî's[11] sources estimated that the sixteen Turcoman principalities established by that time could mobilize over a quarter million cavalrymen. This figure is obviously exaggerated. However, it can be said that Al-'Umarî's figures give rough estimate of the size of the adult male population of fighting capability in the tribes inhabiting the frontier zone. Compare it with the figures given by Ibn Sa'îd[12] (died in 1274 or 1286) of two hundred thousand tents in Menteshe, in the southwest sector of the frontier, one hundred thousand tents in Paphlagonia, and thirty thousand tents in the middle area. With a new Turkey of great demographic potential and a heightened "Holy War" ideology emerging on the old Seljukid-Byzantine frontier zone, a thrust against the neighboring Byzantine territories in Western Anatolia became almost inevitable.

This westward Turkish expansion was accomplished in the following stages:

1. The seasonal transhumance movements of Turcoman nomads into the Byzantine coastal plains.
2. The organization of small raiding groups under *ghâzî* leaders, who were mostly of tribal origin, for booty raids or for employment as mercenaries.
3. The emergence of successful leaders capable of bringing together local chiefs under their clientship for conquest and for the establishment of Turcoman principalities in the conquered lands.

But underlying all these, the major factor seems to have been a population pressure occasioned by both the continuing immigration from inner Asia Minor and the inelasticity of the rather primitive economy prevalent in the frontier zone, an economy relying mainly on animal husbandry, forest products, carpet weaving, and the slave trade.[13]

By comparing the data from the early Ottoman surveys published by

10. Vryonis, *ibid.*, 49-55, 248-88; Doukas, *Historia Turco-Byzantina* (Detroit: Wayne State University Press, 1975), 133-36.

11. F. Taeschner, ed., *Al-Umarî's Bericht über Anatolien nach den Masâlik al-abṣar* (Leipzig: O. Harrassowitz, 1929), 34-45.

12. See Paul Wittek, *Das Fürstentum Mentesche* (Amsterdam: Oriental Press, 1967), 1-5; first published in Istanbul: Der Abteilung Istanbul des deutschen archäologischen Institutes, 1934.

13. The points I have made here are expanded on in a paper to appear in K. Setton and H. W. Hazard, eds., *The Crusades*, V (forthcoming, University of Wisconsin Press).

Barkan[14] with the descriptions in the Ottoman chronicles,[15] one can establish the following facts:

1. Popular Turcoman dervishes of various denominations were the pioneers in the settlement of the frontier areas in the late thirteenth and fourteenth centuries. These dervishes led and organized the actual settlement process in its initial stages by providing in their orders a kind of organizational framework within which to arrange the relationship of these settlements to the founders of the Turcoman principalities. The newcomers, mostly uprooted peasant youth from the hinterland, joined the founders of the convents and became their dervishes, reclaiming and cultivating the surrounding land for the convents. Since under the constant raids of the *ghâzîs* the Christian population was fleeing the frontier lands, extensive areas were available for settlement and cultivation. Dervishes, or settlers in the guise of dervishes, penetrating deep into half-abandoned Byzantine territory, were able to found their simple convents, soon to become points of attraction for further immigration and the nuclei of future Turkish villages. The *softas* or *sûhtes* of the second half of the sixteenth century, poor country youths in search of livelihood, flocking in the thousands to the religious colleges of the provincial towns, can appropriately be compared to these dervishes of the earlier period in their origins, motives, and their use of the religious institutions for social and economic purposes. A basic difference of the sixteenth-century phenomenon was that now the surplus population from the countryside could no longer orient itself toward frontier lands open to new settlement, and had to turn rather to a ruinous invasion of urban centers.

2. The founders of Turcoman principalities considered it the best policy to protect and give legal sanction to these convents, granting them title to the land and the status of pious endowments. The convent-settlements were outposts not only for settlers but also for *ghâzîs* and military leaders in their raids into Christian territory, often reached through wild and unsettled country. Service to travellers and settlers was expressly required in the diplomas granted by the *ghâzî* lord, an obligation to be fulfilled in return for the endowment. The community thereby acquired a permanent legal status within the body politic. The significance of this institution's position in early Ottoman society can be measured by the unusually great number of convents of this kind in the countryside under the first Ottoman Sultans.

Population of the Ottoman Empire: 22 or 35 Million?

In his recent writings, Braudel[16] favors the idea of a universal increase of population in the sixteenth century, a so-called biological revolution. At the

14. Barkan, "Osmanlı İmparatorluğunda," *op. cit.*; Ö. L. Barkan, *Hüdavendigâr Livâsı* (Ankara: Turkish Historical Society, forthcoming); Ö. L. Barkan, "Les problèmes fonciers dans l'Empire Ottoman au temps de sa fondation," *Annales d'histoire sociale*, I, 3, 1939, 233-37.

15. The most important of these chronicles is Aşık Paşazâde's, see B. Lewis and P. Holt, eds., *Historians of the Middle East* (London: Oxford University Press, 1962).

16. See Braudel, *Mediterranean*, *op. cit.*, I, 402 ff.; F. Braudel, *Capitalism and Material Life, 1400-1800* (New York: Harper and Row, 1973), 1-65.

same time, the Mediterranean world as a whole recorded, according to Braudel, a growth rate of 100%, increasing from 30 or 35 million to 60 or 70 million. There was definitely a rapid increase in the periods 1500-1550 and 1560-1580 in the Western half of the sea. This increase was, he asserted, "the major factor in all the revolutions with which we are concerned, more important than the Turkish conquest, the discovery and colonization of America, or the imperial vocation of Spain."[17]

Braudel estimates the population of the Ottoman Empire around 1600 to be 22 to 26 million, breaking down this figure by regions as follows:[18]

	millions
European Turkey	8
Asian Turkey	8
Egypt	2-3
Tunis and Algeria	2 or 3

On the basis of the figures suggested by Barkan[19] for the 1520's, (12 or 13 million only for Asia Minor and the Balkans) this means an increase of about 33% in a period of 70 or 80 years. According to Barkan, the rate of increase was highest in the cities, reaching 83.6 per cent.[20] Barkan's estimate of 12 or 13 million for the early sixteenth century is based on the total number of households (*hâne*) obtained by counting the entries in the general tax and population surveys made under Süleyman I in the period 1520-1530.[21] The geographical distribution is given below:

	Households
Asia Minor (modern Turkey in Asia, excluding the eastern provinces of Bayburt, Kemah, and Malatya)	872,610[22]
Arab provinces (Syria and Palestine)	131,843
Rumeli (the Balkans south of the Danube and Sava rivers)	1,040,457
Total	2,044,900

In addition to the taxable population, these registers include the tax exempt such as the military in the provinces, functionaries, and the retired, but they exclude the domestic servants and retinue of the governors, the Sultan's palace

17. *Mediterranean, op. cit.*, I, 405.

18. This figure, Braudel argued in *ibid.*, I, 396, agrees with the assumption that the population of the Islamic world was about double the total population of Italy.

19. "Recensement," *op. cit.*, 20; and, "Fiscal Surveys," *op. cit.*, 169.

20. *Ibid.*; in Braudel, *Mediterranean, op. cit.*, I, 410: 90 percent.

21. Barkan, "Fiscal Surveys," *op. cit.*, 169. Barkan has not yet completed his vast project on Ottoman surveys. The figures he gives in his studies differ.

22. In "Recensement," *op. cit.*, the figure is 1,026,173.

servants, members of the standing army and slaves. Barkan uses a multiplier of five for households, and adds one million for those not included in the registers.

Adding the population of the lands conquered between 1530 and 1600 and assuming a population growth of 60 percent in the same period, Barkan suggests a figure for the whole empire of 30-35 million at the turn of the century. Braudel has labelled this an "optimistic judgement," and sticks to his own estimate of 22-26 million.

In a paper published in 1970, Barkan[23] gives the following population figures, based on the results of research on the Ottoman surveys in the period 1570-80:

	Households
Asia Minor (modern Turkey, excluding its eastern provinces)	1,360,474
Arab provinces (Syria and Palestine in the period 1570-1590)	283,551
Iraq (Bagdad and Basra provinces)	88,297
Total	1,732,322

(no figures are given for the Balkans)

As in his previous paper, Barkan thus finds a population growth rate of 59.9% for the period 1520-1580. In Braudel's opinion[24] a growth at this rate "seems reasonable." However a natural growth rate of 60% on the basis of a population of 12 million would add about 7.2 million, thus bringing the total population up to about 19 million in 1580. Even if we add the population of the new conquests and annexations in the period 1530-1600 (North East Asia Minor, Georgia, Northern Azerbaidjan, Iraq, North Africa, Temeşvar, and Cyprus), it is not clear how we could reach a figure of 30 million. One of the most interesting findings of Barkan is that on the social structure of Asia Minor.[25]

	Households			
	1520-1530	*1570-1580*	*percent growth*	*percentage of total pop. in 1580*
Settled Muslim	640,193	1,025,487	60	75.4
Nomadic Muslim	160,564	220,217	38	16.2
Christian	71,577	114,198	60	8.4

Plainly pastoral nomads still constituted an important percentage of the population of Asia Minor in 1580. But the rate of increase of their population was about half that of the other sectors, a fact obviously attributable to sedentarization. The rate of growth of the Christian population follows the general Ottoman growth rate trend. A different growth rate is observed among the individual

23. "Fiscal Surveys," *op. cit.*, 169, 171.

24. Braudel, *Mediterranean, op. cit.*, I, 398.

25. See Barkan, "Recensement," *op. cit.*, tables I, V, VI, VII.

regions,[26] and in large cities, mainly as a result of migration.

Research on Balkan demography during the Ottoman period has been considerably expanded by recent studies based on Ottoman archival materials. Publication by Todorov and Barkan[27] of the Ottoman poll-tax registers has provided us with a firm basis for the study of non-Muslim population in the Balkans in the period 1488-1492.

Non-Muslim Population subject to Poll-tax in Rumeli[28] *(Balkans south of the Sava and Danube including Istanbul)*

Year	*Households* (hâne)
1488	625,729
1489	665,846
1490	696,661

The increase in the number of *hânes* should be attributed to improvement in registration methods rather than to natural increase in this period of three years. *Eflaks*, Christian pastoral nomads of the Balkans, 19,079, 34,902 and 34,970 in 1488, 1489, and 1490 respectively, are included in the above totals.

The revenue totals from the poll-tax showed considerable growth in the 1520's, which can be interpreted as an indication of a natural increase in population.

26. The following is a simplified version of Barkan's table in "Fiscal Surveys," *op. cit.*, 169:

Provinces	*(Households)* *1520-1530*	*1570-1580*	*percent growth*
Anadolu (western Asia Minor)	474,447	672,512	41.7
Karaman (central Asia Minor)	146,644	268,028	82.8
Zulkadriye (Kırşehir-Maraş area)	69,481	113,028	62.6
Rûm-i Kadîm (Amasya-Tokat area)	106,062	189,643	79.0
Rûm-i Hadîs (Trabzon-Malatya area)	75,976	117,263	54.0
TOTAL	872,610	1,360,474	

27. Nicolai Todorov, "La situation démographique de la péninsule balkanique au cours des XVe et XVIe siècles," *Annuaire de l'Université de Sofia, Faculté de Philosophie et d'Histoire*, LIII, 2, 1959, 193-226; Barkan, "894 (1488/89)," *op. cit.*; Barkan, using the same type of documents, *Muhâsebe-i Cizye* has corrected Todorov's calculations. Barkan describes the *Muhâsebe-i Cizye* registers as a unique and incomparable source for demographic studies because of their completeness. At the same time he tries to show all their shortcomings. His introduction to this study, dealing with the poll-tax (*cizye*) registers of 1488-1490 is of basic importance for Ottoman demographic studies. Also see M. Sokoloski, "Le développement de quelques villes dans le sud des Balkans au XVe et XVIIe siècles," *Balcanica*, I, 1970, 81-106; J. Káldy-Nagy, "Bevölkerungsstatistischer Quellenwert der *Ğizye*-Defter und der *Tahrir*-Defter," *Acta Orientalia*, II, 1960, 259-67) showed that we have to determine for each register how the household unit for poll-tax was reckoned since it changed according to the fortunes of the taxpayers each time.

28. Barkan, *ibid.*, 26, *Ek Cedvel* no. I.

Poll-tax Revenue from the Non-Muslim Population in Rumeli and Anatolia[29]

Year	*Million* akça
1488	32.4
1524	36.4
1527	42.2

Barkan gives the following figures for the whole population in the Balkans[30] (excluding Istanbul) for the period of 1520-1535:

	Households
Muslims	194,958
Christians	862,707
Jews	4,134
Total	1,061,799

The increase at the rate of about 25% between the years 1490 and 1535 must be partially accounted for by natural population growth. Increases due to declining exemptions from the tax and to more thorough survey work alone could not explain such a large increase.

Urban Population

In his *La Méditerranée* Braudel[31] pointed out a general and steady increase in urban population in the sixteenth century, both in the Christian West and in the Islamic East. He further observed that all categories of towns shared in this trend and that urban populations rose more quickly than rural. In the following century this trend was reversed. Barkan, publishing preliminary results of his research on this subject, underlined the truth of these observations for Ottoman urban centers.[32] Leaving aside exceptional cases such as Aleppo and Bursa, the population in these principal cities increased on the average by about 90 per

29. Barkan, *ibid.*, 16.

30. "Recensement," *op. cit.*, 32, Table VI.

31. *Mediterranean, op. cit.*, I, 325-52.

32. The following table was first published in Barkan, "Tarihî Demografi," *op. cit.*, 35; and, Barkan, "Fiscal Surveys," *op. cit.*, 168. In my table I omitted Istanbul; for this city see H. İnalcık, "İstanbul," *Encyclopaedia of Islam*, 2nd ed., IV, 224-48.

cent. A comparison of Barkan's lists[33] makes it clear that some cities and towns in the Balkans had a population with a Muslim majority while the surrounding rural areas had a Christian majority in the early sixteenth century.

Households

	In rural areas		*In cities*	
	Muslims	*Christians*	*Muslims*	*Christians*
Sarajevo	16,935	19,619	1,024	—
Triccala	12,347	57,671	301	343
Nicopolis	9,122	31,891	468	775
Sofia	1,569	24,341	471	238

The Ottomans were city builders. The most important cities in the region were originally the seat of the military chiefs on the frontier zones, which rapidly developed into relatively crowded commercial centers with such typical Ottoman institutions as *bedestans*, caravanserais, and bazaars, all based on pious endowments. (*Bedestans*, economic centers of Ottoman cities, were to be found only in the important cities on the main trade routes.)[34] The bulk of the population in many of those cities consisted of Muslim artisans.[35] The Balkan cities were real centers of Ottoman rule and culture and the network of the Balkan cities today dates back actually to the Ottoman Empire.[36]

Population of the Principal Cities and Towns in the Ottoman Empire

	City or town	*1520-1530*	*1571-1580*
Syria	Aleppo	56,881	45,331
	Damascus	57,326	—
Asia Minor	Bursa	34,930	70,686
	Amid	18,942 (1541)	31,443
	Ankara	14,872	29,007
	Tokat	8,354	13,282
	Konya	6,127	15,356
	Sivas	5,560	16,846
Balkans	Athens	12,633	17,616
	Edirne	22,335	30,140
	Sarajevo	5,632	23,485
	Monastir	4,647	5,918
	Skoplje	4,631	9,867
	Sofia	3,899	7,848

33. "Recensement," *op. cit.*, Tables VI and VII; "Sürgünler," *op. cit.*, 237, 295.

34. See İnalcık, "İstanbul," *op. cit.*, 227-38. On Ottoman urbanism and towns, see notes 39 and 40.

35. See Barkan's lists in "Tarihî Demografi," *op. cit.* 25-26, and "Quelques observations sur l'organisation économique et sociale des villes ottomanes," *Recueil de l'société Jean Bodin*, VII, *La Ville*, 1, 1955, 264-310.

36. N. Todorov, *Balkanskiiatgrad XV-XIXvek: sotsiolno-ıkonomichesko i demografsko razvitie* (Sofia: Izdetelstvo Nauka i Izkustvo, 1972).

Ronald Jennings' examination of population changes in five selected cities of central and eastern Asia Minor in the sixteenth century is of particular interest from methodological point of view.[37] His conclusions may be summarized as follows:

Population Growth in Four Anatolian Cities, based on Jennings' article.

(Percentage)

City	*1500-23*	*1523-50*	*1550-85*	*1523-85*	*1585 (adult male pop.)*
Kayseri	3	49	134	249	8,251
Karaman	—	—	—	195	2,048
Amasya	—	—	—	67	3,326
Trabzon	—	11	29	44	2,122

Kayseri and Karaman, Jennings stressed, "expanded at a rate far in excess of the expectations of Braudel." The rate of growth varied from one city to another as a result of local conditions and general political circumstances, but, says Jennings, they all benefitted from the *Pax Ottomanica* in the sixteenth century. Kayseri's spectacular growth seems to be the outcome of particularly favorable conditions — its rich agricultural hinterland, its vigorous local industry, and, perhaps most importantly, its location on north-south and east-west Anatolian trade routes. Furthermore it received considerable immigration during this period.[38]

Research on the Balkan town and its demography under the Ottoman rule has recently been intensified, thanks to the two conferences organized by International Association of South East European Studies in 1969 (Moscow) and in 1973 (Istanbul).[39] Nikolai Todorov's important monograph on the Balkan town with an emphasis on its demographic and social structure is especially to be mentioned here.[40]

What makes all these figures and calculations shaky, or even mere guesswork, is the fact that the surveys in the Ottoman archives were not made for statistical purposes, but simply as a basis for taxation, and in the nineteenth century for military conscription. To determine whether they are useful for statistical purposes, and, if so, to sift and interpret the demographic data accurately, one ought to have an expert knowledge of the ways in which these registers were

37. Ronald C. Jennings, "Urban Population in Anatolia in the Sixteenth Century: A Study of Kayseri, Karaman, Amasya, Trabzon, and Erzurum," *International Journal of Middle East Studies*, VII, 1, 1976, 21-57.

38. *Ibid.*, 27, 50; and his article, "Kayseri," *Encyclopaedia of Islam*, 2nd ed., IV, 842-46.

39. Conference on the Balkan Town, XV-XVIII Centuries, Moscow, March 29-30, 1969. The papers are published in *Studia Balcanica*, III, 1970. During the discussions T. Stoianovich (see *ibid.*, 191) pointed out the seminal effects of "L'esprit de l'enseignement des *Annales*" on Balkan studies. The second conference, "La colloque interdisciplinaire: Istanbul à la jonction des cultures balkaniques méditerranéennes, slaves et orientales, XVIe-XIXe siècles" was held in Istanbul. The papers are published in *Bulletin de l'association internationale des études du sud-est européen*, XII, 1, 1974.

40. Todorov, *op. cit.*

prepared, and of the specific Ottoman laws which determined the rate, liability, and collection methods of a particular tax. Yet the size of the Ottoman *hâne* (household) or *avâriz hâne*, or the meaning of such terms as *nefer, mücerred, caba,* or *kara*, which changed regionally or from one period to another, are still matters of controversy.[41] Furthermore, the level of our knowledge of changes in crop patterns, cultivation methods, and types of land tenure, as well as the political and institutional conjuncture at a given time in Ottoman society, does not permit us to make appropriate analyses on the data on population. At this stage of research, the focus should be on detailed studies for each particular area, taking into account local factors as well as historical conjuncture.

Problem of Population Pressure: Demography and Economic Conditions

Following Maurice Aymard's basic work[42] on wheat trade between Venice and Levant, Braudel suggested[43] that the drop in Italy's wheat imports from the Ottoman dominions during the period 1564-1600 can be taken as an indication of population pressure in the Empire. The strict Ottoman prohibitions on wheat exports which began in 1564 were, he thought, the result of growing demand in the Levant; in the previous period, 1548-64, however, wheat exports on a large scale were made possible by the great quantity of surplus wheat in the Levant — the Turkish wheat boom. The tolerant attitude of the Ottoman government toward wheat exports and the considerably lower prices in the Levant during this period were seen as indication of a large surplus owing to a "smaller population."[44] Of course, the variations in grain trade were dependent not only on the size of the population but also on such factors as wars, government policies, and climate. But the question still remains whether the changes observed were really long-term ones determined by population growth or short-term ones caused by occasional factors.

41. Barkan's choice of a single multiplier of five per *hâne* (household) in the Ottoman surveys is now being reconsidered. L. Erder ("Measurement of Pre-Industrial Population Changes: The Ottoman Empire from the 15th to the 17th Century," *Middle Eastern Studies*, XI, 3, Oct. 1975, 284-301) examined the question in the light of modern demographic theory. In view of the fact that many surveys also register population as *nefer*, supposedly taxable adult males, Erder suggests the following for a more reliable methodology of estimating populations: I. Instead of taking as a basis for our calculations *hâne* the household family unit, which is often purely a fiscal convenience and is not geographically constant, it is safer to consider the actual survey entries for the male population above the age of puberty, *nefer*. II. Given "the relationship of population growth rates and the changing age composition of a population," comparative ranges in population multipliers can be established (see p. 297, Table 4). As she establishes them, all multipliers are confined to a relatively narrow range between 3 and 4. This is safer because the possible variation, is smaller. However these multipliers must be used in connection with large populations and with settlements that can be identified from one survey to the next. Bruce McGowan applied an interesting method of calculating total production in the rural areas in "Food Supply and Taxation on the Middle Danube (1568-1579)," *Archivum Ottomanicum*, I, 1969, 139-96.

42. Maurice Aymard, *Venise, Raguse et le commerce du blé pendant la seconde moitié du XVIe siècle* (Paris: Ecole Pratique des Hautes Etudes, 1966).

43. *Mediterranean, op. cit.*, I, 593-94.

44. Aymard, *op. cit.*, 129; F. Braudel, *ibid.*, 583.

In one of his early studies published in 1950, Mustafa Akdağ[45] posed the question of population pressure in Anatolia without being aware of Braudel's hypothesis (first published in 1949). Though admitting that no detailed investigation had been done of the subject, he suggested on the basis of the growing frequency of reports on shortages in the major cities, that it was not before the reign of Süleyman I (1520-66), and particularly not before the middle of the sixteenth century, that a "long-term shortage in grain" seems to have appeared in Turkey.[46] Increasingly concerned with the difficulty of supplying the big cities, the government made every effort to stop the contraband wheat trade. It is interesting to read in the Ottoman reports that widespread contraband trade was carried on in the coastal areas: the profiteers, offering 20% more than the officially set prices, amassed in their storehouses large quantities of wheat to sell to "European ship owners;" and timar-holders, governors, Janissaries, and even members of the ulema were actively involved in this profitable trade. According to Akdağ,[47] however, the real cause of long-term shortage in Anatolia was not the contraband trade stimulated by higher European prices, but the spread of the *çiftlik* system (estates owned by grandees), which entailed the decrease of cultivated land in favor of animal breeding. According to Aymard,[48] who used Venetian documentation, the situation in the second half of the sixteenth century can be summarized as follows:

1548-53	Bad harvests and shortages in Italy; exceptional abundance and low prices in Turkey; 300-400 thousand staia (240-320 thousand hectoliters) were exported from Turkey in 1552
1553-60	Bad situation continues in Italy (excluding 1553); Ottoman government imposes export prohibition because of shortages and wars
1565-67	Ottoman prohibitions
1570-72	Ottoman-Venetian war; prohibitions
1574-75	Shortage and famine in Anatolia and Istanbul
1582-88	Fluctuations in the imports from the Levant
1588	Shortage in Istanbul
1589	Great shortage in the Levant
1590	Great shortage in Italy; wheat imports from northern countries
1591-93	Re-opening of the wheat market of the Levant
1594	Ottoman prohibition; Italy's massive imports from northern countries
1595-1629	Levant competes with northern countries in supplying Italy's wheat

45. Mustafa Akdağ, "Osmanlı İmparatorluğunun Kuruluş ve İnkişafı Devrinde Türkiye'nin İktisadî Vaziyeti," *Belleten*, XIV, 55, 1950, 390.

46. *Ibid.*, 390-91; M. Akdag, *Türkiye'nin İktisadî ve İçtimaî Tarihi*, II, (Ankara: Türk Tarih Kurumu, 1971), 343. There were great famines in the years 1494-1503.

47. Akdağ, "Osmanlı," *op. cit.*, 392-93.

48. Aymard, *op. cit.*, 112-114, tables.

The Venetian Bailo, always on the lookout for the possibility of wheat export from the Ottoman dominions, provides us in his reports with reliable observations on the fluctuations of grain production in the Empire. Investigations of the Turkish archives might provide further data for comparison and lead us to more conclusive findings.

But Güçer's research[49] into the Ottoman sources on crop shortages in the period 1578-1637 is not complete enough to enable us to make meaningful comparisons. The following list can be drawn up from his findings:

1564-65	Widespread shortage in Anatolia (cf. Akdağ, *Belleten* XIV, 396)
1574-76	Severe shortage in Istanbul (also in Akdağ, *ibid.*, 401)
1579	Shortage in Archipelago, Syria
1580	Shortage in western Asia Minor, Archipelago
1583	Shortage in Archipelago, Aleppo
1584	Shortage in western Anatolia, Syrian coasts, Tripoli
1585	Shortage in western Anatolia, Rumeli (Edirne, Berkofca, Temeşvar), Lepanto, Zulkadriye in Eastern Asia Minor
1590	Shortage in Damascus
1591	Shortage in Skoplje
1609	Shortage in Crimea, the Tokat-Çorum area, Batum, western Anatolia

In this list, the shortages indicated in the Aegean area are particularly noteworthy, since that area provided the main source for Venetian wheat purchases, whether by permit or contraband. The severe crop shortages and rising prices in western Anatolia in 1564-65, witnessed in Venetian sources as well,[50] led to an active wheat traffic from Macedonia and Thrace to the Aegean coasts of Asia Minor. Akdağ,[51] in a sweeping generalization, suggested an almost permanent shortage and relatively high prices in Western Anatolia and the Marmara basin as a result of massive purchases by Western nations in the sixteenth century. As to the shortages and rising prices in Istanbul in the 1580's, these are attributed in the Venetian sources to a diversion of surplus to the army in the East.

Briefly speaking, in the period 1549-1593, the Levant, or to be more precise, the Aegean coasts and Albania, constituted the principal wheat market from which Venice replenished its short supplies. It has been suggested that, prior to

49. Lütfi Güçer, *XVI-XVII Asırlarda Osmanlı İmparatorluğunda Hububat Meselesi ve Hububattan Alınan Vergiler* (İstanbul: İstanbul Üniversitesi İktisat Fakültesi, 1964), 8-9, Table I. On wheat trade, L. Güçer, "XVII. yüzyıl Ortalarında İstanbul'un İaşesi için Lüzumlu Hububatın Temini Meselesi," *İktisat Fakültesi Mecmuası* XII, 1950/51, 397-416; L. Güçer, "Osmanlı İmparatorluğu Dahilinde Hububat Ticaretinin tâbi Olduğu Kayıtlar," *İktisat Fakültesi Mecmuası*, XIII, 1951/52, 76-98; Marie-Mathilde Alexandrescu, "Contribution à l'étude de l'approvisionnement en blé de Constantinople au XVIIIe siècle," *Studia et Acta Orientalia*, I, 1957, 13-37.

50. Aymard, *op. cit.*, 31.

51. Akdağ, "Osmanlı," *op. cit.*, 513.

1549, the Republic relied upon Italian wheat-producing areas, and that after 1593 massive wheat imports from the Baltic countries changed the pattern, without, however, eliminating the imports from the Levant. In fact, in the years 1600-01 and 1628-29, because of favorably low price levels, Levantine wheat supplies replaced those from northern countries.[52] Within this broad picture, variations in wheat imports from the Levant do not seem to suggest a progressive decline which might be attributed to a constant factor such as long-term population pressure. The boom of 1549-53, taken as the beginning of a new era in the east-west trade, may simply have been the outcome of an unusual disparity of prices between the two areas resulting from exceptionally good harvests in the Levant and great shortages in Italy.[53] It should be added that the Ottoman campaigns in Transylvania in the years 1551-52 did not obviously affect the large scale wheat exports. In any case, because of the high transport costs, imports from the Levant were economically feasible only when prices in the Levant sank below half the Italian prices.[54] In fact, price seems to be the most comprehensive single indicator of the east-west trade.

The Price Factor in East-West Trade

In the period 1548-52, the massive exports from the Levant also coincided with cheaper silver in Italy from 1540,[55] so that Italian buyers made massive purchases not only in wheat but also in such other commodities as wool, leather, timber, sugar, and furs. Thus a price disparity large enough to justify speculation, whether resulting from a real shortage or from an inflation in silver in Italy, seems to have played a decisive role in the variations in the Levantine trade. It must be remembered that even in times of acute shortages in the Levant contraband trade continued.[56]

If we take the period 1550-82, when silver coins in the Ottoman Empire as well as in Ragusa and in Venice remained fairly stable in value, we see that the official Ottoman wheat price almost doubled, rising from a 4-5 *akça* to 8-10.[57]

52. Aymard, *op. cit.*, 166-67.

53. Aymard (*ibid.*, 125) pointed out that heavy impositions on wheat exports from Sicily made the Venetians turn to the Levant. Braudel (*Mediterranean, op. cit.*, I, 581) also suggests that the use of larger cargo vessels reducing transportation costs, became a factor in the expansion of the wheat trade.

54. Aymard, *op. cit.*, 50; also see Ljuben Berov, "Changes in Price Conditions in Trade Between Turkey and Europe in the 16th-19th Century [sic]," *Etudes Balkaniques*, II-III, 170-73.

55. Braudel, *Mediterranean, op. cit.*, I, 476. For particularly light silver coins in the Levant during this period, see a report by the Venetian Bailo in Istanbul, cited in Braudel, *Mediterranean, op. cit.*, I, 450.

56. For an example in 1564, see Akdağ, "Osmanlı," *op. cit.*, 396.

57. For wheat prices in the Ottoman Empire, see Akdağ, *ibid.*, 528-37; Güçer, *XVI-XVII Asırlarda, op. cit.*, 59; Ö. L. Barkan, graph in Braudel, *Mediterranean, op. cit.*, I, 518, and "Price Revolution of the Sixteenth Century: A Turning Point in the Economic History of the Near East," *International Journal of Middle East Studies*, VI, 1, Jan. 1975, 8-15; Aymard, *op. cit.*, 120-45; Braudel, *Mediterranean, op. cit.*, I, 516, 518. For the period 1490-1540, prices in Akdag (2-3 *akça* per *kile*, *kile* = 25.656 kg) are lower than Barkan's (4-8 in Bursa, 6-10 in Edirne, 13.5 in İstanbul), apparently because the latter takes prices only in the capital cities. Bursa *kadı* records confirm Barkan's prices there. The official prices set for wheat in Thrace during the same period was 4-5 *akça* per *kile*. See Tayyib Gökbilgin, *Edirne ve Paşa Livāsı* (İstanbul:

The rise was approximately the same rate in Venice except at the time of shortages in Venice, 1551-54. Ragusa, an Ottoman tributary, was granted *trata* (export licenses) at times when this was denied to Venice. As to the price levels in the three different areas, we see that in Venice they were 4-10 times higher than the Ottoman prices during 1551-54 and 4-5 times higher in the following period, while in Ragusa they were 2-3 times higher than the Ottoman prices from 1550-82, but almost the same as Anatolian prices in the period of 1590-1600. Ottoman devaluation of 1584-86 caused a sharp increase in prices. It seems that during the *Celâlî* depredations in Anatolia, 1595-1610, wheat prices were much lower in Rumeli; wheat shipments from Rumeli to Anatolia would seem to confirm this fact. The depradations of the *Celâlîs*, rebellious mercenary companies, caused the peasant population to flee the countryside en masse, and seem to have resulted in a dramatic decline in agriculture and in famines in Central Anatolia.[58] Thus, considering wheat prices in the Levant, roughly four distinct periods can be discerned in the sixteenth century. These are 1500-50, 1550-85, 1585-95, 1595-1610. But did this pattern emerge from a population pressure, production level, or disparity in the price of silver?

Theory of Çiftlik *System and Integration of Ottoman Economy with the West*

In the context of east-west wheat trade, the Ottoman Empire is also brought into the theory of the "refeudalization" of Eastern Europe. Braudel, subscribing to Aymard's hypothesis,[59] suggests that:

> The grain crisis, combined with the money crisis, was largely responsible for encouraging the development of inherited property . . . , to full ownership as exemplified by the contemporary estates of Hungary and Poland. If historians talk of "refeudalization" . . . in the West between the sixteenth and eighteenth centuries, a very similar pattern was developing in Turkey. . . . Ömer Lûtfi Barkan and his pupils in the course of an extensive research program have confirmed this spread of the modern estate (*çiftlik*) to the advantage of the Sultanas and Pashas whom we know to have been engaged in the grain boom. . . . One suspects that this transformation was very far reaching. Turkey like Western Europe was living through the "price revolution" and the agricultural revolution imposed upon her, as upon other countries, by population growth. . . . Great changes were certainly on the way after the 1560's.

On this interesting theory, which seeks to show another way in which the Ottoman Empire shared a "common destiny," let me here add only the following remarks. Among various factors affecting the level of Ottoman wheat exports

İstanbul Universitesi, Edebiyat Fakültesi, 1952), 168, 237, 248, 297. S. Faroqhi and H. İslamoğlu, "Crop Patterns and Agricultural Trends in Sixteenth-Century Anatolia," paper presented at First International Congress of the Social and Economic History of Turkey: 1071-1920 (Ankara: Hacettepe Univ., July 11-13, 1977), give the same rate in central Anatolia for the period 1570-74, but 10 in Iznik and 18 for the Adana area. In the period 1550-1584, before the Ottoman devaluation, wheat prices increased moderately, but after the devaluation they shot up to 20 *akça* or more in the period 1585-95, 40-50 *akça* in the period 1595-1610. As Braudel pointed out, unless we establish comprehensive price series covering long periods for different parts of the Empire, we cannot be certain of our assumptions.

58. Akdağ, "Osmanlı," *op. cit.*, 532-37, graph on 533; M. Akdağ, "Celâlî İsyanlarında Büyük Kaçğunluk," *Tarih Araştırmaları Dergisi*, II, 2/3, 1964, 1-49.; L. Güçer, *XVI-XVII. Asırlarda*, *op. cit.*, 19.

59. Braudel, *Mediterranean*, *op. cit.*, I, 593-94; Aymard, *op. cit.*, 51-52.

was the demand for silver: by the treasury to finance the war machine, which increasingly depended on paid mercenary troops, by the members of the ruling class to maintain their retinue and position, and by the simple peasants to fulfill their tax obligations to the state or to the timar-holders. These three must be considered the most significant variables, sometimes overriding all other considerations. In 1548, a report from Egypt to the Sultan[60] stated that the five hundred thousand gold pieces for the annual fixed payment to the treasury were not easily collected because of unusually low grain prices, the result of three consecutive abundant harvests. The storehouses, the report added, were full and awaiting buyers, but "for both the emîns, kesşâfs, and other imperial collectors as well as the common tax paying subjects it was extremely hard to sell [their wheat] and pay the tax due." In 1549-1551, the availability of great quantities of grain at such low prices was evidently the main reason for "the renewal of Italian commerce with Egypt (cereals, but also spices, linen, sugar, etc.)."[61] Thus silver was so badly needed in the Ottoman Empire that the Ottomans were ready to offer their valuable wheat reserves for sale to the Westerners. It must also be remembered that almost half the revenues from the *timâr/khâss* or *wakf* lands, which constituted no less than 90% of the arable lands in the Balkans and Asia Minor, were exacted in kind, but then had to be converted to cash for the treasury or the timar-holder. Farmers were asked to pay their obligations in cash and, despite government orders to the contrary, timar-holders also pressed taxpayers to pay their tithes not in kind but in cash.[62] Under these circumstances the Ottoman economy strained to adjust, it is argued, to a money economy, whose actualization obviously demanded a closer economic integration with the Western Mediterranean.[63]

It is also true that there was strong pressure toward integration from the West, manifesting itself in the offer of high prices and the organization of large-scale contraband trade in the Aegean.[64] The Ottoman government struggled to protect its internal market through the enforcement of fixed prices, the prohibition of export of such basic necessity goods as grain, cotton, leather, hides and wax along with strategic items such as powder, arms and lead; through fighting against smuggling, not only in the Aegean Sea but also in the internal market; and by pursuing and prosecuting those native merchants engaged in collecting and hoarding the above-mentioned goods directly from the villages.

Although Aymard says in one place that Ottoman efforts to curb the large-scale wheat trade to Venice were indeed successful, he seems generally to have

60. Nationalbibliothek, Vienna, Manuscript AF 239, *Münsheât-i İbrahim Bey*, v.78b.

61. Aymard, *op. cit.*, 48, 56, 122. In the years 1549-1555, large Venetian cargo ships left Venice for the Archipelago, İstanbul and Egypt.

62. During the years of abundance even the common people were permitted to sell their surpluses directly to the foreigners; see Aymard, *ibid.*, 50-51.

63. See notes 83 and 87.

64. Rüstem, the Grand Vizier, reportedly said to the Bailo about the Venetians, "che vengono pigliar grani nell'Archipelago a forze de denari," cited by Aymard, *op. cit.*, 50. Western nations also pressed the Porte to grant trade privileges; see H. İnalcık, "İmtiyāzāt," *Encyclopaedia of Islam*, 2nd ed., IV, 1179-89.

accepted that, as a result of disorganization and ineffectiveness, combined with the demand for bullion and luxury goods, the Ottoman market was virtually a free one.[65] Thus, there apparently was no serious obstacle to the integration process which led to the spread of estate (*çiftlik*) agriculture in the Ottoman dominions.

But still the problem of the origins and nature of an Ottoman "*çiftlik* system," supposedly capable of changing the "Ottoman social structure," is a very complex one. Let me only say here that those Sultanas or Pashas supposedly converting their "beneficium" to full ownership in Braudel's terms[66] were in fact simply selling the tithe income of their "beneficium" (*timâr, arpalık, paşmaklık*, etc.), which was paid in kind by the *reaya*, the peasant possessors of the state owned lands. If such lands granted by the Sultan as *mülk*, freehold property, they were immediately turned into *wakf*, pious endowments, as practiced in the periods prior to the sixteenth century. The persisting characteristics of the Ottoman socio-political system were such that the large Ottoman estates, owned or controlled by the grandees (*ekâbir çiftliği*) had a character peculiarly their own in the seveenteenth and even the eighteenth centuries. At any rate the existence of *çiftliks* does not allow them to be identified with central or eastern European forms, where developments took place within a totally different context dominated by an aristocracy in absolute control of the land.

The Evidence Supplied by the Ottoman Surveys on Population Pressure

Setting aside theories that population pressure might be inferred from such external variables as the change in the volume of grain exports, shortages in urban centers, or the rise in prices, all of which depended on diverse and often accidental factors, Michael Cook, Wolf-Dieter Hütteroth, and Mustafa Soysal, and most recently Suraiya Faroqhi and Huri İslamoğlu[67] have set out to study the problem directly in the Ottoman countryside. By using Ottoman fiscal surveys they have sought to examine in selected areas the ratio of population to its resources and whether it changed considerably over a given period of time; thus giving rise to those phenomena such as unavailability of marginal land, a rise in land prices, an increase in the number of landless peasants, emigration, etc., which would indicate a population pressure.

M. Cook was the first to examine carefully and critically the Ottoman fiscal surveys in the period 1450-1575, looking at three selected areas comprising some seven hundred villages: Aydın on the Aegean coast, one of the most fertile areas of Asia Minor; Hamid in a mountainous region of the Southwest; and Tokat in northeastern Anatolia. Cook observes[68] that, in all these areas, we can speak of "a demographic saturation under sixteenth-century conditions." As to the conditions of cultivation, he points out "a general reduction of the size of the land holding in the possession of the individual peasant,"[69] and that "the peasants were reaching the limits of cultivation as defined by their physical environment," as can be seen "through the attempts to squeeze a harvest out of the hillside towards the end of the period."[70] A growth in both the size of the population and the extent of arable land was an undeniable fact, but "the population growth was more rapid than the extension of cultivation." On the basis of an index with a base level of 10 in 1475, the population by 1575 had grown to 17 while the land under cultivation had reached only 12.[71] In addition, the average peasant household landholding had fallen from half a *çift* (one *çift* varied between 60-150 thousand square meters) to a third or even a quarter *çift* by the end of the period. However, he pointed out, this does not necessarily indicate real population pressure, for there is always the possibility of a more intensive exploitation of the soil.[72] Moreover, he adds, conclusions drawn from the study of the fiscal surveys are always questionable due simply to the shortcomings of the records themselves.[73] "The surveys indicate a dramatic increase in the proportion of adult males unmarried. . . . If this can be taken at all seriously (since it may simply have to do with an unrecorded change in fiscal practice), it provides an elegant confirmation of the population pressure hypothesis."[74] Also the fact that food prices rose faster than wages is "a fairly

65. Aymard, *ibid.*, 50, 59, 61, 70, 95, 99, 132, 167-68. The original idea comes from Braudel, *Mediterranean, op. cit.*, I, 539.

66. Braudel, *ibid.*, I, 593-94. For the early history and the origins of the *çiftlik* system, see H. İnalcık, "Capital Formation in the Ottoman Empire," *Journal of Economic History*, XIX, 1, Mar. 1969, 124-35; I. Beldiceanu-Steinherr, "Fiscalité et formes de possession de la terre dans l'Anatolie pré-ottomane," *Journal of Economic and Social History of the Orient*, XX, 1976, 234-322. The *çiftliks* belonging to Rüstem Pasha and his wife were all pious endowments (*waqf*). See Gökbilgin, *op. cit.*, 500-501, 518, 524-25. Like other viziers in the imperial council, Rüstem Pasha was eager to sell the wheat produce of his endowed *çiftliks* to the Venetians; see Aymard, *ibid.*, 51; T. Gökbilgin, "Rüstem Paşa," *Tarih Dergisi*, VIII, 1955, 32. After the sixteenth century, changes occurred in the traditional Ottoman *çiftlik* system. *Çiftlik* owners were now mostly influential local notables (*dyâns*) and state owned lands and *reaya* were increasingly involved in the system. For these developments see H. İnalcık, "Centralization and Decentralization in Ottoman Administration," in T. Naff and R. Owen, eds., *Studies in Eighteenth Century Islamic History* (London and Amsterdam: Feffer & Simons, 1977), 27-52; H. İnalcık, "The Ottoman Decline and its Effects upon Reaya," in H. Birnbaum and S. Vryonis, eds., *Aspects of the Balkans, Continuity and Change* (The Hague and Paris: Mouton, 1972), 338-54; H. İnalcık, "Military and Fiscal Transformation in the Ottoman Empire," *Archivum Ottomanicum*, VI, 1978 (forthcoming)

67. M. A. Cook, *Population Pressure in Rural Anatolia, 1450-1600* (London: Oxford University Press, 1972); Wolf-Dieter Hütteroth, *Ländliche Siedlungen im südlichen Inneranatolien in den letzten vierhundert Jahren* (Göttingen: Göttinger Geographische Abhandlungen, Heft 46, 1968); W. Hütteroth, *Historische Geographie des Amasya-Gebiets im 16. Jahrhundert* (Erlangen: Erlanger Geographische Arbeiten, V, 1977); Mustafa Soysal, *Die Siedlungs – und Landschaftsentwicklung der Çukurova, mit besonderer Berüksichtigung der Yüregir-Ebene* (Erlangen: Erlanger Geographische Arbeiten, IV, 1976); Faroqhi and İslamoğlu, *op. cit.*

68. Cook, *ibid.*, 15.

69. *Ibid.*, 12.

70. *Ibid.*, 21-22. Xavier de Planhol, "Geography, Politics and Nomadism in Anatolia," *International Social Science Journal*, XI, 1959, 525-31, observed that Anatolian nomads under the constant pressure of agriculturalists were pushed into higher pasture lands in all but eastern Asia Minor during the sixteenth and seventeenth centuries.

71. Cook, *op. cit.*, 10-11.

72. *Ibid.*, 13-14.

73. For a discussion of this point see *ibid.*, 20-21, 52-53.

74. *Ibid.*, 26-27.

convincing case for a shift in demand, but the evidence is slight." Cook also points out that our present knowledge of Ottoman agricultural history is not adequate to determine whether there was an intensification in agricultural methods.[75]

Suraiya Faroqhi and Leila Erder[76] have studied the question of population pressure during the period 1550-1620, with special emphasis on the demographic and economic consequences of the *Celâlî* disorders in Asia Minor. Selecting two areas of very different characteristics, the Sancaks of Şebin (Şabin) Karahisar and İzmid (Kocaeli), they found in both for the years 1550-1620 a decrease in the number of settlements:

Kocaeli from 161 (1561) to 141 (1615)
Karahisar from 426 (1569) to 402 (1613)

and in the size of the tax-paying population (in *hâne*):

Kocaeli from 5439 (1540's) to 4730 (1613)
Karahisar from 13,679 (1569) to 7755

After making note of the uncertainty of Ottoman survey data, they stated in conclusion that Karahisar showed a sharp increase in total population during the period 1547-69 and an equally dramatic decline during the period 1569-1613, while in Kocaeli the pattern of decline was less evident. In their opinion, the difference in the Kocaeli pattern can be attributed to the formation of large land holdings (*çiftlik*), with the introduction of new crops and farming patterns and an ensuing rise in productivity. They noted that their findings that there was some decline in population towards the end of the sixteenth century concur with the conclusions of Necdet Tunçdilek, Akdağ and Hütteroth for other regions of Asia Minor.

Recently Suraiyà Faroqhi, and Huri İslamoğlu[77] have made comparisons of the rate of population increase with agricultural production in other areas in Asia Minor. They have tried to correlate population change with shifts in production and crop patterns. In their joint paper, Faroqhi and İslamoğlu, using the data on fifteen selected districts (*nâhiye*) from Ottoman survey registers dating from 1520 to 1600, conclude that the increase in grain production in most of these districts was much below the rate of growth in population. According to their calculations, with the exception of İznik and Adana, the population in all districts grew at a rate greater than 50 percent. The authors' explanations for the two exceptions are, first, that the Adana (Çukurova) area was in this period still predominantly a tribal area, and secondly, that the *çiftlik* system of "commercialized large estates" was presumably on the rise in both areas. In response to population growth, they think an increase in production as well as a change in crop pattern occurred. On the dry central plateau there was a shift from wheat

75. On the agricultural history of Turkey see H. İnalcık, "Filāha," *Encyclopaedia of Islam*, 2nd ed., III, 906-09; S. Faroqhi, "Rural Society in Anatolia and the Balkans during the Sixteenth century," *Turcica*, IX, 1, 1977, 161-96; Faroqhi and İslamoğlu, *op. cit.*; and recent publications of Hütteroth and Soysal (see note 67).

76. "Population Rise and Fall in Anatolia, 1550-1620," to be published in *Middle East Studies*. I am indebted to the authors for letting me read the paper.

77. Faroqhi and İslamoglu, *op. cit.*

to barley and minor grains, and on the coastal plains of Tire and Adana to barley and cotton.

The authors, arguing that no more objective basis of calculation has yet been derived from the data in the surveys, adopted tax on crops and number of taxpayers as the indicators on which changes in grain production and population could be demonstrated.[78] But it is a well-known fact that the general fiscal surveys (*mufassal defters*) are not complete in their data on revenue and population because a part of these two items was often recorded in separate surveys, particularly those for the extensive *wakfs*. Sometimes the data thus separated from or reinstated in a survey might change not only the amount of tax revenue and number of taxpayers but also the picture on crop patterns. Some of the unusual situations which have been observed may be explained by this fact. On the other hand the switch from wheat to barley may simply have been due to the fact that the government demanded large quantities of barley during the military campaigns in the East. This demand may have manifested itself in the form of a tax levy in kind (*nüzül*), required 2/3 or 4/5 in barley and 1/3 or 1/5 in wheat, and also in the form of forced government purchases (*sürsat*)[79] which brought about a rise in barley prices.[80]

But what Faroqhi and İslamoğlu tried to show was that the shrinkage in wheat production, the corresponding growth of commercialized crops, and the rise of the so-called *çiftlik* system were all developments that occured under the impact of the "capitalist world-economy" in the period 1515-1600. But in Çukurova (Adana), the only place were a change from grain to a commercialized crop has been established,[81] "world-economy demand" does not seem to have been a

78. The same method has been applied in Hütteroth, *Ländliche., op. cit.*, 166-89; Hütteroth, *Historical Geography, op. cit.*, 36-110; and in Soysal, *op. cit.*, 9-37. Using Ottoman surveys Hütteroth studied the patterns of settlement and agriculture in Central Anatolia (see note 67). According to Hütteroth, agriculture and settlement shrank in the area as a result of political unrest and the expansion of nomads. He also pointed out (p. 70) that large estates (*çiftlik*) of the type prevalent in the Balkans did not exist in Central Anatolia. It should be added that the export of sheep for Istanbul's consumption, as required by the government and organized locally by the chieftain of the Cihanbeyli tribe, must have been an important factor in shaping the economic situation in this steppe area for four hundred years.

79. See Güçer, *XVI-XVII Asırlarda, op. cit.*, 76-114.

80. Faroqhi and İslamoğlu showed that wheat prices rose from 5 to 6 (but in Adana from 12 to 18) and that of barley from 3-4 to 5-6 (in Adana from 8 to 10) after the middle of the sixteenth century.

81. Evidence supplied by the Ottoman customs registers of the fifteenth and sixteenth centuries leaves no room for doubt that Ottoman cotton industries were flourishing in many Anatolian cities — Adana, Kayseri, Bursa, Ankara, Uşak, Konya, Nigdi, Tire, Menemen, Merzifon, and Diyarbekir to mention the most important centers — and that, under a putting-out system, great quantities of cotton goods were produced and sent to distant markets in the Balkans and northern Black Sea regions. (See my forthcoming edition of the customs registers of Caffa and Antalya.) Furthermore cotton goods, cotton thread, and raw cotton made a significant part of Ottoman exports to the Western Mediterranean. (See the lists of P. Masson, *Histoire du commerce français dans le Levant au XVIIe siècle*, 2 vols. [Paris: Lib. Hachette, 1896], *passim*). In the period before the industrial revolution in Europe, Ottoman cottons faced competition only from costly Indian cottons. True, smuggling in cotton as in wheat was always a problem, beginning as early as the fourteenth century with Venetian pressure. Under the Ottomans, even in the period of decentralization in the eighteenth century, one cannot speak of a complete loss of control of trade in vital raw materials (including cotton) at the expense of the internal market as suggested by Barkan ("Price Revolution," *op.*

factor in reality. There, cotton was cultivated on small-sized *mezre'as* (uninhabited arable land) by nomads since there is no evidence of large estates (*çiftliks*) for this period.[82] At any rate the theory that, already in the second half of the sixteenth century, the Ottoman Empire was witnessing the beginning of a fundamental change in agricultural production and landholding system, leading finally to "the dissolution of its social formation"[83] cannot be accepted at this stage of research.

II. Ottoman Price Revolution: A Result of Silver Influx or Population Pressure?

"The Turkish Mediterranean lived and breathed
with the same rhythms as the Christian."

Braudel, *The Mediterranean*, I, 14.

When all the studies in population pressure are evaluated, one is left with one key indicator of the complex demographic and economic phenomena involved, that is, rise in prices.

Since the publication of Braudel's *La Méditerranée*,[84] studies on the rise of prices in the Ottoman dominions have been pursued in two directions. Some stress as the determining factor the impact of the silver influx and monetary policies, others stress the effects of a growing differential between supply and demand resulting from population growth and urbanization within the empire and an expanding trade with the West. Given the chain of upheavals in an empire with an undeveloped monetary economy, how can one, Braudel asks, avoid using the term "price revolution"? In a critical review written in 1951 of Akdağ's study, which focused on surface phenomena such as the shortage of precious metals in the market and state devaluations to explain the rise of prices, I drew attention[85] to the Hamilton/Braudel theory[86] which stressed the impact of silver on the rise in prices throughout the Mediterranean world and added the fact that devaluation played only a partial role in the complex price mechanism in the Ottoman economy.

In a recent article summarizing research on price movements in the Ottoman

cit., 6-7). Under the pressure of the growing demand by native industries to keep cotton supplied regularly and at low prices, the Ottoman government during this entire period, however, felt constrained to prevent smuggling in cotton.

82. Compare Soysal, *op. cit.*, 24, 64, 81. The *çiftlik* appeared there in the nineteenth century.

83. See also H. İslamoğlu and Ç. Keyder, "Agenda for Ottoman History," *Review*, I, 1, 1977, 31-56. Akdağ ("Osmanlı," *op. cit.*, 363, 370-71, and Barkan, "Price Revolution," *op. cit.*, 6-8, 17-18) had formulated a similar theory. In "Military and Fiscal Transformation," *op. cit.*, I tried to focus on internal developments and their impact on the Ottoman social structure.

84. See Braudel, *Mediterranean, op. cit.*, I, 518-19.

85. "Türkiyenin İktisadî Vaziyeti," *Belleten*, XV, 60, 1951, 651-76.

86. Compare the first edition of *La Mediterranée* (Paris: Librairie A. Colin, 1949), 361-420 with *The Mediterranean, op. cit.* 467-542, especially p. 517.

Empire, Barkan[87] concludes that the rise in prices cannot be explained solely by the general inflation in silver, but must be attributed basically to the population pressure in the Empire and the mercantile pressure of Europe on the one hand, and to Ottoman devaluations of the *akça* as a result of growing public expenditures on the other.

It must immediately be noted that one cannot exaggerate the vital significance of the import of precious metals from the West for Ottoman imperial finances and for the economy in general. Certainly the Ottomans themselves were keenly aware of its importance as early as the time of Murad I (1362-1389), when they imposed a tribute of silver on Serbia,[88] and Bayezid I (1389-1402), when the Sultan tried to re-organize and exploit the silver mines of eastern Serbia.[89] The control of these rich silver mines was one of the principal incentives underlying the Ottoman struggle to dominate upper Serbia and Bosnia during the fifteenth century.[90] When Mehmed the Conqueror, in great need of silver to finance his costly imperial policies, established full control over the area, he prohibited[91] the export of silver to Hungary and Italy through Dubrovnik, one of the principal routes by which silver was supplied to Europe. The Ottomans encouraged imported silver and gold by exempting them from customs dues and by taking strict measures to prevent any flow out of the country. To further illustrate this Ottoman policy of attracting and accumulating bullion, it might be added that, not only did the Ottomans exempt silver and gold from customs dues, but they even made it mandatory in some cases for Europeans to bring with them an-

87. "Price Revolution of the Sixteenth Century," *op. cit.*; the original of the article in Turkish is in *Belleten*, XXXIV, 1970, 557-607; cf. Vuk Vinaver, "Monetarna kriza u Turkoj, 1575-1650," *Istoriski Glasnik*, III-IV, 1958, and Skender Rizaj, "Counterfeit of Money in the Balkan Peninsula from the XVth to the XVIIth Century," *Balcanica*, I, 1970, 71-80; S. Hoszowski, "L'Europe centrale devant le révolution des prix: XVIe et XVIIe siècles," *Annales E.S.C.*, XVI, 3, mai-juin 1961, 441-56.

88. According to Nesrî, the Serbian despot offered an annual tribute of fifty thousand *vukiyya* (64,140 kg. silver) to the Ottoman Sultan in 1381; see F. Taeschner, ed., *Gihannumā* (Leipzig: O. Harrassowitz, 1951), 58. In 1332 in a plan of crusade Philip IV, the King of France, was exhorted to capture the five silver mines in Serbia; see A. S. Atiya, *Crusades in Later Middle Ages* (London: Methuen and Co., 1938), 105.

89. See N. Beldiceanu, *Règlements Miniers, 1390-1512* (Paris and The Hague: Mouton, 1964), 53-55, 57.

90. Around 1438, Ottoman Finance Minister Fadlullah urged the Sultan to capture silver and gold mines in Serbia; see Doukas, *op. cit.*, 175-77. Mehmed the Conqueror conquered Serbia and Bosnia in a series of campaigns between 1454 and 1464. In 1444 Venice asked the King of Bosnia to surrender the silver mines in return for military assistance. The Serbian despot's annual revenue from the silver mines of Novobrdo alone amounted to 200,000 gold ducats; see N. Jorga, *Notes et extraits pour servir à l'histoire des Croisades* (Paris: E. Leroux, 1902), II, 152-53; and N. Jorga, *Geschichte des Osmanischen Reiches* (Gotha: F. A. Perthes, 1909), I, 423. On the importance of the silver mines in Serbia, see also M. Mihailović, *Memoirs of a Janissary*, (Ann Arbor: Univ. of Michigan Press, 1975), 75, 77, 99, 103; D. Kovačević, "Dans la Serbie et la Bosnie médievales les mines d'or et d'argent," *Annales E.S.C.*, XV, 2, mars-avr., 1960, 148-58; and especially N. Beldiceanu, *Règlements, op. cit.*

91. Ragusa protested the Ottoman prohibition of silver export already in 1443; see N. Jorga, *Notes et extraits, op. cit.*, II, 151. For Mehmed II's prohibition, see R. Anhegger and H. İnalcık, *Kānūnnāme-i Sultānī ber Mūceb-i 'Örf-i Osmānī* (Ankara: Türk Tarih Kurumu, 1956), 8, 16.

nually a certain amount of silver to be struck in Ottoman mints.[92]

When, in the second half of the sixteenth century, the Ottoman government decided to extend capitulatory privileges to the western nations, the decision was made under conditions of urgent demand for cash to finance the growing needs of the war machine. By this time, a state of war entailed for the Ottomans the equipping of costly armadas,[93] the mounting of siege warfare, the construction of fortresses, and, most importantly, the recruitment of increasingly large numbers of paid mercenary troops equipped with firearms.[94]

This meant, as it did for the Spanish Empire with its numerous financial crises, that vast amounts of bullion had repeatedly to be found at short notice to ensure prompt payment. And it must be remembered that, until vellon replaced it in the following century,[95] the only money acceptable was gold and silver specie. If one is looking for an immediate explanation of the Ottoman shift to a monetary economy in the second half of the sixteenth century, one should focus primarily on the conditions outlined above.

According to Barkan,[96] the price of food more than quadrupled in the 127 years between 1490 and 1617, while in the same period the ratio of gold to silver increased 2.6 times. Thus, he infers, factors other than silver inflation, such as the growing demand resulting from population growth and the expansion of trade with Europe, must be taken into account to explain the difference. Within this long period, however, the years between 1584 and 1606 show a steep rise in prices, reaching a peak in 1606, with all the consequences of a real inflation. Measured on the basis of the price of silver, the general index of prices increased only 62% between 1490 and 1584, but 165% in the following decade.

The impact, sudden and devastating, of Western mercantilism in the "free" trade region of the Levant came first in currency and prices. Selânikî, a contemporary historian and officeholder in the Ottoman finance department, in an explanation of an uprising of cavalrymen at the Porte in 1588,[97] complained of a sudden price change in the following way: "One gold piece," he said, "went up

92. According to the stipulations of the treaty of 1454, the silver and gold imported by the Venetians into the Ottoman Empire was to be minted in the Ottoman mints; see W. Heyd, *Histoire du commerce du Levant* (Paris: Société de l'Orient, 1936), II, 317. European merchants were to deliver annually 400 *kilece* (668 kg.) of silver to the mint of Aleppo in the sixteenth century.

93. For the expenses of an Ottoman naval expedition, see C. Imber, "The Costs of Naval Warfare, The Account of Hayreddin Barbarossa's Herceg Novi Campaign in 1539," *Archivum Ottomanicum*, IV, 1972, 203-16.

94. See İnalcık, "Military and Fiscal Transformation," *op. cit.*

95. In the critical year of 1688, the Ottoman Government decided to accept copper coins in the payment of taxes; see documents in A. Refik, *12. Asırda İstanbul Hayatı* (İstanbul: Devlet Matbaası, 1930), nos. 4-7, 11.

96. "Price Revolution," *op. cit.*, 6-17, and Graph I. Prices rose much higher in İstanbul than in other cities of the Empire; cf. Cengiz Orhonlu, *Telhîsler* (İstanbul: Edebiyat Fakültesi Yayınları, 1970), document no. 9. Here we only considered Edirne and Bursa prices from Barkan's list.

97. *Târih-i Selânikî* (İstanbul: Matbaa-i Âmire, 1281 A. H.), 252. On Selânikî see F. Babinger, *Geschichtsschreiber der Osmanen and ihre Werke* (Leipzig: O. Harrossowitz, 1927), 136.

in value from 60 *akça* to 120, and following this increase all the prices in the market were doubled by the traders. As a result food stuffs and clothing became twice as expensive as before. One who previously received a salary worth ten ducats now found himself seemingly getting only five." It should be noted here that Selânikî takes gold alone as the standard in his evaluation. 'Âlî, another high official in Ottoman finances, echos the alarm among people with fixed salaries, when he said: "Since trades people were selling their goods as they pleased, prices, though officially fixed, went up every day, with the result that a group of traders in the market became wealthy while the military and the elite went bankrupt."

Barkan,[98] summarizing Sahillioğlu's study on Ottoman devaluations, places emphasis on this factor as the principal cause of the price rises at this time. Devaluations of the *akça*, the basic Ottoman monetary unit and money of account, occurred several times before 1584. The first important devaluation took place in 1461 under Mehmed the Conqueror, when 355 *akça* were struck from 100 *dirhem* (320.7 gr.) of silver, a devaluation at a rate of 13 percent. In the long space of the next century, the *akça* was further devalued by 13%, but neither of these devaluations can be compared with the drastic devaluation of 1584-90. By the end of these six years, Sahillioğlu says, 800 *akça*s were being struck from 100 *dirhem* of silver. Through succeeding devaluations the rate became 950 in about 1600, and 1000 in 1618. Barkan makes no attempt to explain the relationship between the sudden increase of Western silver coins in the market and the devaluations introduced by the state. He interprets the devaluation simply as an attempt to ease the financial straits of the state, the explanation forwarded by other historians before him.[99] The real mechanism leading to devaluation, bound up as it is with silver inflation or, more exactly, with the presence of silver specie at different rates in the market, has not been studied in the Ottoman case.

This process is more closely examined by Luigi de Rosa[100] in connection with the monetary problems of the Kingdom of Naples in the period 1570-1600. He notes that the first signs of imbalance appeared with the increase of clipped money on the market and the flight of precious metals from the country, an observation equally valid for the Ottoman case. Frequent government imports of bullion from Spain to Naples did not ease the situation, but only caused an increase in prices. Growing expenditures by the state, and the consequent increase in taxation and in the public debt, were only one aspect of the inflationary process at work. The acute budgetary crisis led to partial state bankruptcy. To prevent the flight of precious metals from the country, it was explicitly requested in 1587 that the value of the currency be re-adjusted to the changed value of silver. The date is of particular interest to us since we know that at

98. "Price Revolution," *op. cit.*, 12-13.

99. M. Belin, "Essai sur l'histoire économique de la Turquie," *Journal asiatique*, 6e série, IV, 1864, 242-96; A. Refik, "Osmanlı İmparatorluğunda Meskûkât," *Türk Tarih Encümeni Mecmuası*, 5, 1340 A. H., 367-79.

100. "The Price Revolution, Wars and Public Banks in Naples," *Histoire économique du monde méditerranéen, 1450-1650, Mélanges en l'honneur de Fernand Braudel* (Toulouse: Privat, 1973), 159-76.

about the same time, under similar pressures, the Ottoman government made its devaluation. Now, I think, we know why and how Ottoman devaluation occured at a particular date.

After 1571, massive Spanish silver shipments were arriving in Italy. In one of the brilliant chapters of *La Méditerranée* Braudel[101] describes in detail how, from 1571 onwards, the Barcelona-Genoa route replaced the Atlantic route for the transfer of the bulk of American treasure to Flanders. A great part of this silver found its way to the Levant through Genoa, Naples, Venice, and Ancona. The reason for this is to be sought primarily in the fact that during just this period there was a great demand for gold on the Spanish side, while in the Levant silver was relatively scarce and gold cheap in relation to silver; thus a new phase in the long history of exchange between Islam, now suffering a silver famine, and Europe, with a gold famine opened.[102]

The Spanish government, then, to give some more details on this important point, had to convert its silver into gold, since the transport of the former overland to Flanders involved great difficulties and expense, and perhaps more importantly, the soldiery in Flanders insisted on payment in gold. Furthermore, it must be noted that in the West, all bills of exchange were payable in gold. In a period of silver inflation, gold became the safe investment. Thus, the great demand for gold and at the same time large production increases at the Potosi silver mines caused an unusual inflation in silver in the western Mediterranean and made the Levant, where the ratio of gold to silver was lower, a profitable market for the exchange of silver for gold. From 1570 on in the Levant, the scarcity of silver was felt more than ever as a result of the unusual increase in state expenses. Italy owed, Braudel[103] shows, its great prosperity during this period to its role as intermediary between these gold and silver zones. Currency traffic between the eastern and western parts of the Mediterranean reached an unprecedented height, from 1570's onwards and, in a short time, Spanish *reales* invaded all the Levant markets. Stimulated by the enormous profits to be realized, often as high as 30%,[104] the speculation in silver and gold even disrupted the traditional pattern of the Levantine trade. In 1603, for example, a return of 250,000 sequins from the Ottoman Empire was reported with amazement.[105] In the same period the amount of silver exported yearly from Venice alone to the Levant was estimated at five million silver pieces.[106] The French government with its strong mercantilistic beliefs was alarmed by this new development among its merchants, now more busily engaged in the profitable trade of Sevillan and Mexican silver coins than in the export of French manufactures to

101. *Mediterranean, op. cit.*, I, 476-517.

102. *Ibid.*, 499-500. For the silver and gold traffic between east and west see Andrew A. Watson, "Back to Gold – and Silver," *The Economic History Review*, 2nd ser., XX, 1, Apr. 1967, 1-34.

103. *Mediterranean, op. cit.*, I, 493-508.

104. *Ibid.*, 500.

105. *Ibid.*, 463.

106. *Ibid.*, 478.

the Levant. A report[107] submitted to the King in 1614 reads: "In the last few years, only minted silver is traded, reaching a figure of more than 7 million *écus* a year in terms of transit through Marseilles alone, without counting other regions."

Counterfeit and clipped money appeared in the Ottoman market as soon as silver inflation upset the ratio of silver to gold, thus unleashing further speculation on the currencies in circulation. This occurred in fact much earlier than 1600.[108] A report[109] dated 1575 from Bursa tells us that the Jewish money exchangers were collecting good *akças* at the rate of 50-55 for one gold piece and, after converting them into counterfeit *akça*, were selling them at a rate of 70 *akça* for one gold piece.

The following Ottoman document dated 997 A.H. (1589 A.D.)[110] tells us under what conditions and how the Ottoman devaluations were carried out. "New *groush* are officially circulated at the rate of 80 *akça*, and each *groush* contains 9 and 1/2 *dirhem* of silver and a little over one *dirhem* of copper. If it is melted and, from the silver thus obtained, *akça* are struck, only 65 *akça* are procured. People in the market are aware of this fact and of the advantage of keeping their good silver *akça* and using only *groush* in their payments. As a result of this *akça* disappears from circulation. The remedy for this is that the *groush* be devalued to a rate of 70 *akça* per *groush*. . . . So, the gain being negligible at the new rate, no one would be interested in hoarding the new silver *akça*." Obviously it was the same disparity between silver coins in circulation which was responsible for people's clipping and falsifying the good silver *akça* put into circulation by the imperial mint. It was this "unofficial devaluation" which forced the state to effect its own devaluation. It is clear from the report that the Ottoman finance experts were fully aware of the workings of Gresham's Law. With this adjustment *akça* and *groush* were brought back to the same level vis-à-vis gold coin, one gold coin now being worth 1.7 *groush*, or about 120 *akça*. Similarly, the explanation for the Ottoman devaluation after 1584 must be the desire to prevent speculation occurring in silver specie at the expense of the state treasury and to prevent the movement of gold to the West, and of silver out of circulation or to Iran, where the ratio of silver to gold was higher than in Turkey. (The ratio was 1 to 12 in Turkey and 1 to 11 in Iran, but 1 to 15 in Sicily.)[111] The devaluation was apparently carried out with the advice of experts, the Jewish bankers who were in control of Ottoman finances during this period, and

107. Paul Masson, *Histoire du commerce français, op. cit.*, I, xix, xxxii-xxxiii.

108. According to Braudel (*Mediterranean, op. cit.*, I, 537-38), counterfeit money did not appear in the Levant before 1600.

109. Akdağ, "Osmanlı," *op. cit.*, 520.

110. It was discovered by Rhoads Murphy in the *Başvekâlet* Archives in Istanbul (Maliyeden Müdevver, no. 22148). My thanks for allowing this quote.

111. W. Hinz, "Steuerinschriften aus dem mittelalterlichen vorderen Orient," *Belleten*, XIII, 52, 1949, 762. For the flight of silver from Iran to India see V. Minorsky, "Introduction," to V. Minorsky, ed., *Tadhkirat al-Mulūk* (London: Luzac, 1943), 19, 27.

who were fully informed of the conditions prevailing in Italy and the measures taken there.[112] The complex problem facing the Ottoman statesmen was that of maintaining the stability of a monetary unit vis-à-vis different specie under circumstances of a changing ratio of gold to silver: a situation that surfaced from time to time in all medieval currency systems.[113]

112. H. İnalcık, "Capital Formation," *op. cit.*, 121-24.

NEVILLE DYSON-HUDSON (SUNY-Binghamton): I was struck by Inalcik's comment that many of these studies of an *Annales* sort, dealing with phenomena which the *Annales* practioners like to deal with, apparently relate to a time when the Ottoman Empire was going through a profound crisis. Now that strikes me as very interesting, in the light of Hobsbawm's earlier suggestion that a characteristic deficiency of *Annales'* style of history might well be its difficulty in coping with great events. And I wonder if we can here get at this question of what kind of great event an *Annales* approach can deal with and what kind apparently it cannot. Surely the crisis of an empire is a great event in some sense. First of all I guess we could do it by asking Hobsbawm if the Ottoman crisis is what he would legitimately consider a great event.

HOBSBAWM: I did not say great events. I said certain formative events in the history of countries. There is a slight nuance. I think the crisis of the Ottoman Empire, about which I know nothing, is admirably explainable in terms of the *Annales* school. What it seems to me is more difficult are these curious but formative events in national life, whose origin may well be analyzed in terms of *longue durée* and structural change, but whose subsequent impact on the shaping of national life is autonomous. There is nothing at all in the *Annales* approach, of indeed if I may say so, even in the classical Marxist approach, to stop us from analyzing the origins of the French Revolution. The difficulty it seems to me is to say what difference has it made to subsequent French history, politically and culturally. Other states too have passed through this experience which is not an economic experience only. And here it seems to me this is a question not only for the *Annales school*. It is a question I think for all of us. Some people, even in the *Annales* school, have begun to recognize the need once again to cope, as it were, with the crucial event, as something which occurs and radiates outward. I don't think however in answer to your question that the crises of empires, such as occured in the Ottoman Empire in the sixteenth century, is one that I was thinking of.

DYSON-HUDSON: As a social anthropologist, I find it fundamentally very distressing to think of the possibility that there might be two sorts of events, as it were, out there.

HUPPERT: Isn't there a special difficulty in the case of the Ottoman Empire? Is there a moment in the history of the Ottoman Empire when it isn't in crisis?

INALCIK: Fernand Braudel's book, in its discussion of the impact of western Mediterranean on the Ottoman Empire revealed to us that the empire was integrated in world history, and not only from the political point of view. We knew that Turkish power in the sixteenth century played a major role in shaping European politics. We began now to understand better this political and military impact of the Turkish in the sixteenth century. Thanks to Fernand Braudel's book, we now see that the Ottoman Levant played a very important role in conveying American silver through the markets of the empire toward the East, to Iran through the Persian Gulf to India, and from there to China. This is one structure which Fernand Braudel brought to light for us, indicating the place of

the Ottoman Empire in universal history. Of course the radical change which occured in the Ottoman Empire had an impact on general conditions, not only in the eastern Mediterranean, but in the whole Mediterranean. There are now some who believe Venetian decadence can be linked to conditions in the Levant. I mean the collapse of the Ottoman central control system affected greatly trade and economic conditions in the Levant, which in turn affected the conditions of the Italian maritime states. But the empire finally adjusted itself to the new conditions and created a viable structure to survive. The whole military and financial system changed; new estates were created. The crisis was important in the way that it prepared a society for a new structure. In light of the question about a theory of change, I think that, by studying the Ottoman example, we can find some interesting points about the mechanism of change.

WALLERSTEIN: I would like to pursue Eric Hobsbawm's point because I think it is very important. The great political event, the great formative event which he gave as an example, was the French Revolution. It is obviously an excellent example. Now it wasn't clear when he made the point at first, but on the second round it became much clearer what he was talking about. If he says the *Annales* school cannot explain an event like the French Revolution, he clearly does not mean that they can't account in some sense for it having occurred, because he went on to say that in some sense they could. In fact, of course, we have the work of Labrousse which attempts an explanation of why the French Revolution occurred and why it occurred when it occurred, taking into account cyclical conjunctures and various other considerations which are typical of an *Annales* approach. So that is not the problem.

There are however two other issues which he raised. One was an assessment of how much change something like the French Revolution really made. Now I don't know any *Annales* historian who ever did that, but I would have thought that the whole *Annales* approach was central to answering that kind of question. Because the *Annales* approach says you take an event and you look underneath it and you see it in terms of the long term, asking: was it epiphenomenal? was it momentary? was it a kind of flash? or did it really make a difference? So one can respond to that question.

Finally, there is the question about the collective mental impact of a great formative event. This refers us back to what Aymard was talking about when he discussed the needs of Italian history and historians today. To what extent does the formative event shape people's perception of their own nation or their own group for a century or two centuries afterward? Aymard was saying that Italian historians today have to cope with the issue of Italian unification and of its final realization, in a sense, under Fascism, that this was their heritage to which they had to give meaning. Hobsbawm was, I thought, making the point that that is also a very central problem of French national history. What has been the legacy of the fact that there had been a French Revolution, that it took the form that it took, that it was complete or incomplete according to your interpretation of the French Revolution? And to what extent is it a living reality in terms of French contemporary politics, which I certainly think it is? Again I don't see why, logically, that is not a question that one could deal with in terms of the *Annales* method. However, the *Annales* school (as well as indeed Marxism) might be resistant to posing that question, in that it becomes very much a question of the impact of idea systems on social structures. Both *Annales* and Marxism historically have placed their great emphasis on economic and social underpinnings, not on idea systems, although to be fair, Febvre of course was centrally concerned with idea systems.

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