The origins of the Spanish Trade in American Cotton*

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"regretting the waste of the cotton abounding in America which in opinion of many is useless I have discovered from my efforts with that which I have had introduced that it is of the most excellent quality and suitability for being spun and woven with the delicacy of the finest holland or muslin" (Jaime Campins, founder of the Royal Manufacture of Mataró, 1747)²

"Cotton shoots out of the ground of its own will" (Intendant of Caracas, concerning Trinidad, to José Galvez minister of the Indies, 4 April 1777)³

Despite the advantages of possessing a vast American empire within which, as well as raw cotton, there was a significant, native cotton industry, a trade in American cotton was slow to develop to 18th century Spain. Calico-printing was introduced at the end of the 1730s but it was on the basis of weaving up imported spun yarn. Attempts at spinning imported American cotton were then made regularly – at the end of the 1740s, between 1751 and 1756 from the mid 1760s to the mid 1770s and from 1783 -but it was only this final effort which was successful, so successful finally that not only was domestic demand satisfied but a significant re-export trade had developed by the mid 1790s. In this paper I shall comment briefly on the problems which obstructed the early development of the trade and then, by means of a more detailed analysis of the period of final success, attempt to evaluate how these problems were resolved.

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² Archivo de la Corona de Aragón, Registro de la Superintendencia, 1/26, f 161-70.

³ Cited by R.D. Hussey, The Caracas Company 1728-1784. A Study in the History of the Spanish Monopolistic Trade, (Harvard, 1934), p. 270.

A distinction has to be made first between cotton growing in the wild and plantation cotton. The development of trades in both experienced difficulties, some of which were common. I shall start with the cotton which grew wild.

Commentators in Spain pointed out that the quality of such cotton was low in that it received no protection from the severity of the weather, it was often harvested at what was not the optimal time of the year – in America the planting time was between March and April and optimal harvesting time between August and January - and frequently it was gathered from the ground with the consequence that it was dirty, had fermented or both. It was found that garments woven with yarn spun with such cotton were weak, tearing easily. Finding sufficient labour for carrying out the cleaning of the cotton was difficult in the New World and yet the dispatch of the cotton unginned greatly added to freight costs – cotton losing some 2/3 of its weight in the ginning process.⁴ Ginning machinery was sent out to America from Catalonia on various occasions - in the 1750s, 1760s and 1770s - but it was not found satisfactory. Two types of machine were dispatched. A simple wooden one with two rollers, of low cost, a few Catalan libras, copied from the models used in Malta (whence Catalonia received its spun cotton) and the Levant and an improved one - more expensive, with iron rollers and gearing to increase its speed and power. The second type of machine in particular was liable to difficulties – the scorching of the cotton – and was not found satisfactory. Insofar that the cotton was ginned, rather than being hand cleaned, it appears that it was the simple

⁴ For such views see Biblioteca de Cataluña (BC), Junta de Comercio (JC), legajo (leg), 51, no 1-8, report of Melchor Guardia and Armengol Gener, members of the Chamber of Commerc, 19 Dec. 1771.

machine that was used mainly.⁵ This though would not have had a very high productivity. Some improvement in the machinery, however, may have taken place in the colonies. This was certainly the case in the Viceroyalty of New Granada where a superior gin was patented in the 1780s⁶ and it was in this Viceroyalty that the problem of cleaning the cotton, whether manually or by machine, was first resolved. It is from Cartagena that the first large cargoes of clean cotton were provided for the Spanish market from the late 1760s and Cartagena continued to be the major supplier through the rest of the century. Elsewhere a high percentage of the cotton continued to be exported unginned, even from as far away as Peru. Even what was to become a major producer, Venezuela, did not resolve the cotton cleaning problem until the 1790s.

The establishment of plantations required agricultural expertise in tillage methods, seed selection, irrigation etc. This was available. The Seven Years' War appears to have been a catalyst, French planters disinterred from colonies captured by the British fleet settled in Spanish possessions – such as Trinidad – or sold their expertise, as in the case of a Martinique planter in Venezuela in 1767. And advice and support was sent from the metropolitan economy together with the ginning machines as well as encouragement to distribute land suitable for cotton growing to the native population. What was less easily resolvable in the lightly populated coastal areas of Venezuela which were going to be central to the Spanish cotton trade was the labour shortage. Slaves were needed and they were expensive and not readily available in view of the trading restrictions with the British Caribbean islands from which the slave trade operated. Here the liberalization in the British trading system in the form of the Free Ports Act of 1766 was of assistance. By

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⁵ BC, JC, leg. 33, no 10, ff 3- 5, report of Melchor de Guardia y Matas and Joseph Francisco Sagui of 12 Sept. 1774.

⁶ BC, Fons Gonima-Janer (FGJ), 44/4

the 1780s slaves were being readily delivered and the measure had contributed to promoting general market development in Venezuela and other island and mainland and Spanish island economies. It is not clear the degree to which the measure contributed to kick-starting the Spanish cotton trade for it was cotton from French colonies, or former French colonies, which first used the free ports as entrepôts for their cotton. The act had been aimed particularly at capturing this trade. Also the West Indian islands themselves were undergoing a boom in their cotton plantations during the 1780s. The priority might have been on commercializing their own cotton. But, unlike its sugar, British West Indian cotton was not protected from the competition which such cotton importing would have caused and there is clear evidence of Spanish American cotton taking this route to Europe in the 1790s. The Spanish trade may thus have drawn benefit from trading externalities developing in the Caribbean by the 1780s.

The freighting problem was occasioned by cotton's bulk and low weight which meant that it would not serve as ballast. The navigational facilities were not good even for high valued items – bullion, indigo, cocoa, sugar – with the laborious convoy system persisting until 1776 and trade often interrupted by warfare. Transporting cotton was bound to be the lowest of priorities.. Freight costs were such that calculations showed (in 1771) that however cheap the raw material it could not compete with the Levantine product. Only a far larger production which generated economies of scale would be able to support such freight costs: this was frequently pointed out and proposals made that bounties on shipments should be offered or all ships obliged to use cotton for occupying any surplus cargo space. Also the fleet system required all imports to pass through Cadiz. This was a further barrier to getting cotton cheaply to Catalonia where it was most needed as it involved more intermediaries and a break in the voyage. Exemptions to the Cadiz monopoly began to be made from the 1720s in the form of privileges to private

companies to trade directly with sections of the America empire in their own right – such as those granted to the Caracas Company, whose seat was in San Sebastian, in 1728 and to the Commercial Company of Barcelona in 1755 which was permitted to trade with other outlying, less developed parts of the empire – the islands of Santo Domingo, Puerto Rico and Margarita. However the very lack of development complicated the establishment of new plantations – the resources in manpower and capital and expertise were lacking – and this, and the existence of far more profitable commodities in which to trade than cotton (among those which the Caracas company dispatched in quantity were bullion, cacoa, sarsaparilla, tobacco, brazil wood, coffee, indigo, white sugar, logwood and hides while only insignificant quantities of cotton were included despite administrative pressure to promote this trade). Further areas with cotton growing traditions, such as New Granada, which was near the heart of the old fleet system, were not included within these early concessions.

Efforts made to introduce the spinning of American cotton into Catalonia in the 1760s were hampered by difficulties of a related kind. Encouragements had been given to the trade by the removal in 1765 of all customs duties on cotton imports however the paper work involved in implementing these, and the funnelling of the trade through Cadiz, made selling and buying cotton a complicated process. Once landed in Cadiz the rights of the cotton to redemption from duty had to be officially certified. Later the certificates arising from this had to be checked against a second set of certificates issued in Barcelona attesting to the cotton's sale for industrial purpose. The principally Cadiz importers passed the cotton onto Catalan middlemen for shipping to Catalonia. Not surprisingly the trade did not flourish. Marketing was clearly inefficient. On the one hand Catalan producers complained of cotton shortages; on the other significant quantities of the cotton imported were unsaleable and had to be re-exported. The import of unginned

cotton – and a considerable proportion was arriving in this state – was a problem for which no solution was found in Cadiz and it seems that it was mainly the unginned which remained unsold. Catalonia, with its Maltese links and the experience of past attempts at spinning had, however, more recourses to take. It put cotton gins to work initially but did better, later, in view of the gins' deficiencies, by "putting out" the uncleaned cotton, principally in Barcelona, for hand cleaning. Poverty levels were such that the cleaning could be done cheaply. On this basis some of Cadiz's surplus, unginned cotton from Cadiz was made use of. On the other hand the experience of these years served to demonstrate the capacity, already, of the New Granada plantations: they were by far the largest suppliers providing substantial cargoes of ginned as well as unginned cotton.

During the 1770s, in the context of the publication of Pedro Campomanes's <u>Discurso</u> sobre el fomento de la industria popular (Discourse on the Promotion of People's Industry), the central thesis of which was the importance of promoting rural industry on the basis of a domestic system within which cotton spinning would, it was clear, fit ideally, yet more attention was given to encouraging the trade in American cotton and the diffusion of cotton spinning within Spain. A principal element within this was the founding of a Royal Spinning Company in Barcelona in 1772 which was committed to diffusing spinning in Catalonia and in other provinces. More cotton purchases were made for it. The episode again revealed the inadequacy of cotton supply. In 1774 and 1775 the Company was having to buy raw cotton in Cadiz at 28 pesos the quintal when raw cotton from the Levant had been selling at 20 pesos a year or two earlier. Again Cartagena would have seem to have been the source for most of this: there are records for the import of over 15000 lbs of cotton thence in the course of 1774. Worse, no cotton at all in the end could be acquired. The Royal Company was not the only

institution to suffer in this way, a recently founded cotton stocking manufacture situated in Puigcerda, on the Catalan frontier, being obliged to leave the majority of its skilled labour force without work for months on end because of cotton scarcity. The incidents provide further insights into the problems under which the trade was labouring at the Spanish end. The market failures reflected the minor and provisional nature of the Catalan engagement with cotton spinning at this stage. Some private spinning had been undertaken by calico printers in the 1760s but this had been absorbed by the Royal Spinning Company and, bar this, the only additional spinning which was taking place – nowhere on any scale - was in Manresa, around Mataró, in Olot and Seo d'Urgell (also involved in cotton stocking knitting) and in one or two other minor centres such as Manlleu and Igualada. No such difficulties were being experienced in supplying other industries and cotton was a widely traded commodity internationally, Marseilles being a centre for the French trade: the lack of a regular, substantial demand for raw cotton in Spain was clearly a significant contributory factor for the difficulties of the trade. No general market in cotton had developed. Mercantilist and health restrictions relating to cotton importing were the main causes for this. The main user of cotton, the calicoprinting industry, was accustomed to relying on Maltese yarn and, with the difficulties in American supply, it returned to this tradition.

The spinning spreading on an artisanal basis outside the control of the Royal Company was, however, a more promising development. This was not shut down and continued to develop through the 1770s and even during the American war despite the interruptions it occasioned to the Atlantic trade. Prompt sales of American cotton were reported despite high costs occasioned by scarcity. One of the few printed statistical records of American cotton imports which exist for this period, Deogracias Niso's Noticia de los caudales, frutos y efectos..., registers what would appear to be some of the impact of this

developing sector: 3 large consignments (totalling 86171 lbs of cotton) were delivered in 1779 and just under 50,000 in 1780. These figures may also reflect early benefits from the Regulation of Free trade of 1778 which unified the earlier piecemeal liberalization of imperial trading to create a single free trading zone from which only New Spain and Venezuela were excluded (until 1789).

With peace in 1783 there was, finally, a rapid expansion in the trade, permitting it to play a critical role in Catalan industrialization. The stages in the development can be plotted from the registers kept in the Archivo General de Indias of the cargoes of the ships which participated in the trade. My research on this is not complete at the moment of submitting this paper but enough can be drawn from prior work, particularly John Fisher's Commercial Relations between Spain and Spanish America and the first results which I am obtaining to provide some insights into the causes for the turn around in the trade's destiny.

Firstly John Fisher's publication: this includes tables recording the value of American cotton imported into Barcelona and Cadiz for the period 1782 to 1796. That he only provides the data for these two ports is not a major drawback as virtually all the cotton came via them, only Malaga, San Sebastian (the Caracas Company) and Tenerife receiving occasional, and never significant, deliveries. His figures are included on table 1 below. They serve to provide an idea of the extent and timing in the trade's growth. As can be seen the trade experience rapid growth through to 1785, was checked in 1787 and

then recovered strongly to peak in 1791 before experiencing a second milder hiatus in 1792 and then attaining its highest levels in 1796. With

TABLE I

Fisher's figures for the value of cotton imports from America (in reales)

	Via Cadiz	Via Barcelona	Totals	
1782	470,090	169,472	639,562	
1783	406,543	234,221	640,764	
1784	625,124	234,221	859,345	
1785	669,650	785,443	1,455,093	
1786	795,296	1,339,742	2,135,038	
1787	267,821	162,716	430,537	
1788	1,100,214	508,738	1,608,952	
1789	1,236,784	677,761	1,914,545	
1790	2,073,248	1,949,264	4,022,512	
1791	3,148,246	3,458,109	6,606,355	
1792	1,115,636	1,261,271	2,376,907	
1793	1,849,879	2,557,006	4,406,885	
1794	5,854,808	1,263,612	7,118,420	
1795	2,228,888	561,008	2,789,896	
1796	9,142,489			

respect to the relative role of Barcelona's and Cadiz's demand in the expansion it can be seen that initially Cadiz provided a lead – it took a while for Barcelona to renew direct

shipping links with America – but that Barcelona was responsible for the first peak in 1786 while the credit is shared for the second in 1791. Much of cotton imported to Cadiz, on the other hand, was for re-export to Barcelona. For the third phase in the expansion, however, while the burst is initiated from Barcelona it is commanded by Cadiz from 1794 – this is the period in which a significant export trade in Spanish American cotton develops particularly to Britain. Full figures exist for 1795: of a total of 1,546,375 lbs of ginned cotton and 67,416 lbs unginned exported over a million went to Britain, 200,000 lbs to Germany, 300,000 lbs to Genoa and Milan and small quantities to the USA, France, Hamburg, Portugal and Tuscany.

Table 2 shows data on cotton imports into Barcelona and Cadiz from America recorded in the registers which I have checked and also extracted from the published 1792 <u>Balanza del Comercio</u>. The proportion of the total registers for the imports on which it is based is given in the top column. The table provides some insights into the total size of the trade in 1791 and 1792. With respect to what it reveals about its geography what is impressive is the near global scale of the area from which cotton was being drawn. That such a low valued and bulky product as unginned cotton was shipped in some quantity from Peru to Barcelona in the course of 1791 reflects the strength of demand for the new fibre at various points in the trading cycle. Such distant sources for cotton, on the other hand, were not tapped regularly it can be seen the bulk of the cotton from a handful of centres - Havana, Cartagena and Santa Marta at the outset and, joining them from 1790, Vera Cruz, La Guayra and Maracaibo.

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⁷ Sources A Matilla Tascón, <u>Balanza del comercio exterior de España en el año 1795</u>, (Madrid, 1965), pp. 8, 35, 52, 57, 64, 76, 89, 121, 151.

Table 2. Raw cotton imports into Barcelona and Cadiz in lbs $^{\rm 8}$

	1781	1782	1784	1786	1788	1790	1791	1792
% of registers conulted	100	100	89	27	54	61	85	100
Havana ginned	79750			49,525	11,783	15,245	92,275	98.150
Havana unginned			232022		113400	16684	477128	61980
Vera Cruz ginned								8,625
Vera Cruz unginned			11450			231050	1332024	731075
VC, Campeche ginned							2,500	
VC, Camp unginned						225	9300	
VC/Havana ginned			10,350					
VC/Hav/Camp ginned			10,850					
Campeche ginned								640500
Campeche unginned					11150			2300
Camp/Hav, unginned						600		
Santa Marta ginned	44400	66200						
Sta Marta/Hav ginned				98,150				
Cartagena ginned			112600	3,000	270,075	342,025	1,179,192	688,625
Cartagena unginned			35000		64000	137950	, i	Í
Cartagena, Hav ginned				21,600		57,825	90,050	
Carta/Hav/VC unginned			44650			ĺ		
Cumana/Caracas ginned			63250				51175	3,150
La Guayra ginned			20500			99,216	223,679	155,800
La Guayra unginned					8629	16051	75060	300
La Guay/VC unginned							64725	
Maracaibo ginned							53,625	32,750
New Guiana ginned						61,450	24,168	22,400
Trinidad ginned							437	
Montevid/B-A ginned			14,250		1,200			34,175
Monte/B-A unginned			21875			175		
Callao, Peru unginned							45225	300
Philippines ginned					17,800			
Philippines unginned					ĺ	370		
Dominios de America			17450					
Unspecified unginned						333	673	
TOTAL GINNED	124150	66200	231,800	172275	300,858	575761	1,681,101	1,684,475
TOTAL UNGINNED			362447		197179	460847	2004135	795655

⁸ Sources for 1781=6 & 1788-91: AGI, Indif gen, legs. 2209A, 2209B, 2180, 2444, 2448, 2450, 2451 For 1792: Matilla Tascón, *Balanza*, pp. 209-10.

The southern Caribbean - a rectangle with its poles at Poles at Vera Cruz, Havana, La Guiara and Cartagena – provided the core to the trade. The high levels of import of unginned cotton in 1791 is of interest. Barcelona was responsible for most of this 1,233,099 lbs of the unginned cotton imported from Vera Cruz being shipped straight there. It is clear that Catalonia was not only drawing on most of the ginned, plantation cotton which was available but was absorbing an enormous quantity of unginned cotton too for cleaning in its interior, the same rural networks which it was developing for its spinning serving for cleaning it.

Respecting the unginned/ginned distinction we see that the northern poles of the rectangle were the principal suppliers of the former while the latter proceeded from Cartagena and Santa Marta, from the beginning of our period, and New Guiana, Cumana, Maracaibo and, above all, La Guayra, from 1790. Totalling annual figures gives us 871,064 lbs and 2,646,117 lbs of unginned raw cotton against 266,970 lbs and just 8,625 lbs of ginned for Havana and Vera Cruz against 2,646,117 lbs of ginned and just 326,950 lbs of unginned for Cartagena and Santa Marta. Figures for La Guayra and Maracaibo are 106,040 lbs of unginned and 685,570 lbs of ginned. New Granada's role as by far Spain's most important supplier of cotton is revealed again.

Turning to the shipping of the cotton an outline of how this was achieved in Barcelona's case is provided by another source, customs records, which have been

Table 3: Ships entering Barcelona carrying American cotton 1781-1799

YEAR	From Cadiz or from Cadiz via other port	From America or fr Am. via other port	TOTAL	
1781		2	2	
1782		1	1	
1783	1	2	3	
1784	10	6	16	
1785	3	8	11	
1786	3	6	9	
1787	2	6	8	
1788	5	3	8	
1789	5	7	12	
1790	9	2	11	
1791	5	10	15	
1792	2	2	4	
1793	5	16	21	
1794	6	10	16	
1795	1	11	12	
1796	2	16	18	
1797	5	1	6	
1798				
1799	1		1	

been researched by Juan Carles Maixé Altés. From his figures for all ships entering Barcelona carrying cotton I have extracted those which came from America, directly or indirectly, between 1781 and 1799.⁹ The table documents the point made earlier about much of the Cadiz imported cotton being intended for the Catalan market.

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⁹ J. C. Maixé Altés, "De la dependencia maltesa al triunfo de la hilatura catalan. El comercio catalanomaltés 1780-1800" in *Actas primer coloquio internacional hispano maltes de historia*, (Madrid, 1991), pp. 198-217.

What the table shows emphatically is that Catalonia had achieved a position of majority autonomy for its American trade in cotton by the mid 1780s – a metamorphosis with respect the situation only twenty years earlier. The predominance of direct Catalan imports in the growth of the trade emerged from table 1 and the imports recorded here were delivered nearly entirely in Catalan vessels the only exception in Maixé Altes's data being provided by one from Mahon, Minorca.

Ships used were predominantly medium sized one – saetias, polacras, paquebots and bergantins – only 8 out of the 60 different vessels caught by our sample of 73 ships entering the port of Barcelona drawn from the Cadiz registers being recorded as frigates, the larger vessel. Most of the ships were navigated by owner/captains. This is clear in some cases from the entries in the registers which record the captain's name and that of "su saetia", "su polacra", "su fragata" etc. but it may have been the case for all the ships for, unlike as we shall see at Cadiz, none of the sample records a distinct owner of a ship to the captain. As well as undertaking the direct voyages to America which supplied the cotton, it is Catalan captains who delivered the cargoes of cotton sent on from Cadiz.

Catalan captains also played a significant role in the American deliveries to Cadiz: of a sample of 99 different ships delivering to Cadiz 15 were Catalan. The precedence can either be traced from the registers, where there are captains described their as "del comercio de Cataluña", "vecino del principado", "de nacion catalan", "dueño y maestro del Principado" and, in one case, "dueño y maestro de Arenys de Mar", or by the coincidence in a captain's, and his ship's names in the Cadiz registers with those recorded in Barcelona's. There was Catalan commercial involvement too in Cadiz with two arriving ships recorded as belonging to members of the "comercio" of Cataluña. Catalonia was not the only outside supplier of shipping to the Cadiz trade. The entrepôt character of the port attracted vessels from

elsewhere within the Spanish realms and this too shows up in our sample – 6 vessels from the Canaries, 1 from Asturias, 1 from Santander, 1 from Seville, 1 from Marcaibo in Venezuela and five owned by the Royal Philippine company. At least 30% of the ships carrying the cotton into Cadiz consequently (the place of origin of many ships is not recorded) were from other parts. There were other distinctions from Barcelona too relating to the character of the "fleet" which was delivering the Cadiz cotton. A higher proportion of the ships were frigates – 33 of the 78 arrivals for which this information exists – and in the Cadiz case the captaining of ships by owners was rare, details of distinct owners to "masters" being provided for 47 of the sample.

Cotton was a far less important commodity in Cadiz than in Barcelona (though this situation was going to change slightly in the mid 1790s). Cotton there for the free trading years up to 1796 (1778-1796) represented a mere .35% of the total value of the commodity trade against 9% in Barcelona's case (9% though of a far smaller import trade in commodities: it was just 2% the size of that of Cadiz if bullion imports are excluded). The Cadiz trades were also serviced by a significantly larger fleet (an average of 134 vessels entered the entrepôt annually in procedence from America annually between 1778 and 1796 against 43 in Barcelona's case). As a smaller trade in a far larger entrepôt cotton was far less visible in Cadiz than in Barcelona. Even in the peak years in the trade it was not carried by the majority of the ships arriving and it tended to represent a near insignificant component in the value of this minority's cargoes.

The appearances are though that cotton had become a regular "filler" used to draw profit from unused cargo space once more valuable commodities had been loaded. Loads sometimes are of 100 lbs of less. When it was unginned even quite large quantities of cotton

¹⁰ Fisher, Commercial Relations, pp. 107, 114-16.

would only represent a small % of the total cargo value. For example the 131400 lbs of unginned cotton which the frigate Jesus Nazareno imported into Barcelona in 1791 represented just 3% of the value of the total cargo. This is a percentage of a cargo including gold and silver however even if the comparison is made purely in terms of commodities the value of the cotton is considerably less than that of logwood. However, even in the case of imports to Cadiz, and more generally in the case of Barcelona, there are ships' cargoes in which the value of cotton included shows that its carriage must have been a primary, if not the principal commercial purpose of the return voyage. Some examples of these large and valuable cargoes are included in table 7 below. As can be seen significant being transported – more than the entire imports of cotton from American to Spain for most years up to 1780 – by individual ships from 1781 and such ships were arriving with sufficient regularity by 1791 to permit the progression to mass production in spinning which was occurring in Catalonia.

Table 4, SHIPS ARRIVING AT CADIZ AND BARCELONA WITH SUBSTANTIAL COTTON CARGOES¹¹

Date of arrival	Ship type	From	То	Lbs cotton carried	Cargo value (reales)*	Cotton value§	% cotton value
9/12/81	Saetia	Havana	Barcelona	42400		204160	
10/12/81	Bergantin	Sta Marta	Barcelona	79750		108000	
16/9/88	Fragata	Cartagena	Cadiz	83225		213056	
21/10/88	Fragata	Cartagena	Cadiz	129025+		328151	
9/2/90	Saetia	Cartagena	Barcelona	59250	799062	151680	20
17/2/90	Polacra	Cartagena	Barcelona	266850+	802802	400388	50
28/4/91	Fragata	Cartagena	Cadiz	109575		528151	
20/5/91	Polacra	Cartagena	Barcelona	104200	1608720**	266752	17
21/5/91	Fragata	Cartagena	Cadiz	41650	1975642**	199920•	10
21/6/91	Bergantin	Cartagena	Barcelona	55025		140864	
26/6/91	Bergantin	Maracaibo	Cadiz	30900		79104	
3/7/91	Saetia	Cartagena	Barcelona	32235	277946	82456	30
16/7/91	Paquebot	La Guiana	Cadiz	46300	951412	223166•	23
18/9/91	Polacra	Cartagena	Barcelona	134700	1498563**	646560	43
4/10/91	Bergantin	Cartagena	Barcelona	83900	235560	214784	91
14/10/91	Bergantin	Havana	Barcelona	75700	481554	193792	40
21/11/91	Fragata	Cartagena	Barcelona	68100	877336**	174336	20

^{*} excluding bullion, § official values of 256 reales lb ginned & 51 unginned, + includes unginned, **here cargo includes plata, • current value here: 482 reales

How well then was the demand for raw cotton being met during this take-off period in Catalan industrialization. The table below is taken from the cotton buying register of the Barcelona Royal Spinning Company. It is clear that supply of cotton had become elastic, the lowest prices coinciding with the years of maximal demand. And prices were steady until 1797, earlier wider price differentials representing a growing sophistication of the market as

¹¹ Sources in following legajos of AGI, Indiferente General: 1781: 2209B; 1788, 2444; 1790, 2448; 1791: 2449, 2450, 2451.

awareness developed of the varying qualities of different cotton staples. The rise in prices from 1797 reflected not market but

Prices of American and other cotton in Barcelona in Castilian lbs¹²

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1783
       11s 5d – 12s 4d
1784
       9s 4d – 11s 6d
       9s 8d – 11s
1785
1786
       9s 4d – 10s 1d
       11s 6d – 14s 3d
1787
1788
       9s 4d – 11s 1d
1789
       8s 6d - 11s
1790
       7s 6d - 9s
1791
       6s 6d – 9s 10d
1792
       7s 10d – 8s 6d
1793
       8s 6d – 8s 9d.
1794
       8s 2d – 12s 8d
1795
       7s 11d – 10s 4d; fino de Caracas 14s 8d
1796
1797
       fino de Caracas, 16s 8d – 17s 6d; de Lima, 20s 2d
1798
       Smyrna, 20s; Fernambuco, 23s 6d; Philippines, 20s
1799
       Smyrna/Levant, 23s 6d – 28s 4d
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political failure, the outbreak of war with Britain in 1797 which brought Spain's American trade to a halt.

¹² BC, Fons Gonima Janer, llibre 1, Cotton purchasing book of Barcelona Spinning Company

Starting with the point of supply, the origins of a successful trade in American cotton to Spain can be connected with the colonial reforms undertaken within the Spanish empire from 1765: the introduction of the intendancy system, the encouragement given to the promotion of commodity trading and, above all, the eroding of the monopolies at both sides of the Atlantic and introduction of growing free trade within Spain – where from 1765 nine ports, including Barcelona, were allowed to trade directly with America (five others gained the right in 1778). This, and parallel liberalization in neighbouring Caribbean imperial states, created an internationalist, golden age in the region for sufficient time for confidence to build up and market development to take place. More specifically related to cotton, New Granada's tradition in cotton growing, her large population and suitable soil and climatic conditions gave it a head start in the growing of cotton: the elasticity of supply shown by its growing cotton growers was to be absolutely critical for the early stages of Catalonia's industrial revolution. The interaction between New Granada was helped by strong family and commercial links between the areas – there had been much Catalan migration 13 – and specific technical support to cotton growing in the area was provided by Catalans. The high level of demand for cotton in a context of rapid market development provided, finally, the incentive necessary for progress in the plantation cotton growing of Caracas and La Guaira which by the mid 1790s had become major, additional suppliers of high quality ginned cotton.

With respect to shipping the cotton across the Atlantic the boom in the American trade which caused such an expansion in Atlantic traffic provided an opportunity which had not existed previously for getting the cotton to Spain as a return product. This point has been made much of and the Catalans were particularly well placed to benefit from this as they

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¹³ A Mcfarlane, Columbia before Independence. Economy, Society, and Politics under Bourbon Rule, (Cambridge, 1993)

were the leading, national exporters of manufactured goods to the empire. However the details on the shippings from Cartagena show that carrying the cotton back in this way was not just a by-product of the export trade – the cotton connections with Cartagena, we have seen, went far back and the principal business of a number of the ships returning from Cartagena had become the carriage of cotton. More generally the importance of the role of Catalan shipping, to Barcelona and to Cadiz – as well as elsewhere – attests to the strength of the recovery of the Principality's ship-building and shipping sector in the eighteenth century. It must have been as important as any of the factors leading to the early industrialization of the region. "En 1760 il n'y avoit en Catalogne que 3 bâtimens qui fissent le commerce aux Indes", recorded the French consul in 1784, "actuellement tous y vont". The remarks of Pierre Vilar, the source for the citation, are equally quotable "Statistique grossière, aproximative", he writes of the French consul's figures, "mais dont nous retiendrons l'observation marginale, quant aux dates frappantes du développement, et surtout le fait de l'activité des petits ports; Barcelone, n'est, pour l'armement, même pas l'égale de Mataró, Sitjes, Vilanova..." Like the parallel industrialization in cotton key areas of change were now outside the Catalan capital.

The steady cotton prices demonstrate how easily the vast Catalan commercial resources could be mobilized when there was a cotton industry which needed a large and regular supply of good quality cotton. This was a more sudden change even than that in shipping. As late as the mid 1770s the number of areas spinning cotton in Catalonia could almost have been counted on the fingers of one hand. Fifteen years later cotton spinning was a region wide activity and the bases of the area's industrialization had been created. This demand was the critical factor in the growth of the cotton trade and the cotton trade's ability to respond to it was a critical factor in sustaining the momentum which was building up.