





International experience in TVET-industry cooperation for China's poorest province

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ABSTRACT

Technological acceleration, increased global engagement, and national aspirations to restructure its economy and promote innovation have persuaded China to intensify an emphasis on skills acquisition through technical-vocational education and training (TVET). After a background of China's experience, this paper examines the case of Gansu, the poorest province, and how the German Two Track TVET model can help address six of Gansu key difficulties, including cooperation with enterprises, internships, graduate employment, teacher upgrading, quality standards, and poverty alleviation. Among the lessons for Gansu are incentives for enterprises, systematic selection and contract protection for internships, employment stability and professional development, examination boards and skill certification of graduates, and information systems with guidance for underserved groups.

Strengthening TVET-industry cooperation in China's poorest province: adapting selected lesson from the German experience

The percent of China's people living in extreme poverty was reduced from 88 percent in 1981 to one percent in 2018 (World Bank, 2018). As China eliminated poverty and moved to become a moderately well-off society by 2020, it renewed its commitment toward higher technical-vocational education and training. After the establishment of the People's Republic of China in 1949, China began to transfer aspects of the Soviet Union's planned economy to ensure a close integration between the industries run by various government ministries and their schools, colleges and technical institutes. In such a command economy, decisions about education, skills, training and employment were conducted in a top-down manner. This caused misalignments and inefficiencies. In 1978, Deng Xiaoping launched the country on a course of economic reform that has lasted for more than forty years and is responsible for China's unprecedented growth and development (Postiglione, 2011).

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The introduction of market forces in China's economy also had the effect of shifting households' preferences toward academic higher education. The government introduced legislation to ensure that at least half of all senior secondary education would be technical-vocation in character. Still, enrolments in senior secondary technicalvocational education dropped to 38 percent by 2001 (Xing & Li, 2009).

As higher education expanded at a breakneck pace, colleges and universities were merged to create economies of scale. Colleges and universities formerly under different government ministries (i.e. railroad, agriculture, textile, energy, etc.) were transferred to the central education ministry or provincial education bureaus. The resulting dual track structure of higher education included a four-year course of study that led to an academic degree and a three year technical-vocational course of study that led to a three-year diploma.

The tide began to turn in 2007 when China's Premier stressed the key role of technical-vocational education in his annual work report. Government departments of education, finance and labor began to hold special meetings that focused on technicalvocational education and its enrolment rates, infrastructure, non-governmental (minban) schools and colleges, and financial assistance to poor rural students. Enrolments in technical-vocational higher education began to rise and constituted nearly half of all higher education.

Nevertheless, the popular preference for academic higher education that continued during such a rapid expansion of higher education left many provincial level colleges and universities with low quality instruction and graduates who were underprepared for the labor market. In 2014, the State Council promulgated a 'Decision on Accelerating the Development of Modern Vocational Education' (Tian, Wang, & Liu, 2019). The central government introduced incentives to transform as many as 600 provincial level universities into application oriented technical universities. As the world's second largest economy introduced such major reforms in technical-vocational education, it made a renewed effort to study the experiences of several other industrialized countries.

Throughout the period of economic reforms and opening to the outside world, China had studied technical-vocational education and training (TVET) models in other countries, including Canada and US (Postiglione, 2009; Postiglione, Watkins, & Wang, 2008). The post-2010 era of economic restructuring demanded even more diverse and specialized skills for higher value production. Market forces created new demands from industry for knowledge and skills, and a greater demand from households for jobs and higher income. TVET programs became essential to nurture skills for China's transition from a labor intensive, low investment, export oriented economy to a technically skilled and high performing service economy that would rely more on domestic consumption.

Implementing new policies and practices to strengthen higher TVET in China's less developed provinces became far more of a challenge than it had been in the prosperous eastern coastal regions. A particularly important case that receives special attention by the Chinese government is that of TVET reform in Gansu Province. Gansu ranks 30th out of 31 provinces in disposable income per capita. Its population of 24 million occupies a relatively arid land that is wedged between the Tibetan Plateau and Loess Plateau bordering Mongolia. Its agricultural production includes cotton, maize, melons, and linseed oil, as well as herbs used in Chinese medicine. Most of Gansu's economy is based on mining and rare earth minerals. While over 90 percent of its population is Han

Chinese, Gansu also has large communities of ethnic minorities including Tibetans, Mongols, Kazahks, Hui, Dongxiang, Baoan, Tu, Yugur, and Salar.

Gansu's two TVE levels are secondary and higher technical-vocational education. In 2017, it had 209 ordinary technical-vocational secondary schools, adult technical-vocational secondary schools and technical-vocational high schools enrolling 193,800 students. It also had 27 higher technical-vocational colleges enrolling 123,900 students. About 100,000 graduates from the middle schools gain tuition-free access to secondary technical-vocational schools. A skills-training network was set up with six agriculturally oriented technical-vocational colleges, 87 agriculture radio and television schools, and 80 county-centered vocational education centers. A provincial training network makes it possible for about 700,000 to receive employment, entrepreneurship, and labor service training every year.

This paper analyzes the challenges faces by Gansu in building a modern TVET system, and what might be learned from the German TVET experience to address these challenges. While Germany and Gansu have significant civilizational differences, they have increasingly become mutually embedded in the same interconnected and market-oriented global economy that is transformed by technological acceleration. Among Gansu's key challenges are to: Lack of TVET-enterprise cooperation; Low participation in apprenticeships; Inadequate teaching force; Insufficient quality of employment; Scarce partnering for quality standards; unfocused strategy for poverty alleviation. This paper argues that Gansu has potentially valuable lessons to learn from Germany's TVET.

Difficulty 1: lack of TVET-enterprise cooperation

Gansu's major difficulty concerns a lack of deep cooperation among TVET institutions and industrial enterprises. Too many enterprises are reluctant to enter into cooperation. This limits the quality of TVET, restricts the attractiveness of TVET for students and their families, and constrains economic restructuring, and may eventually become an obstacle to Gansu's role in China's One Belt and One Road Initiative. The lack of enthusiasm on the part of industrial enterprises compounds the ability of TVET institutions to address the problem. Government has a role to facilitate cooperation and ensure that small and medium enterprises are offered irresistible incentives to enter into cooperation with TVET schools and colleges. The methods of 'ideological awakening' of business leaders and the personal relationships have been of little use. That the industrial base is poor or that the proportion of heavy industries is low cannot be a reason to justify an inability to innovate and carry out high quality skilled training. The problem can only be addressed by ushering in a new era of cooperation between TVET schools and colleges with small and medium industrial enterprises. Because of the lack of effective policies and regulations, cooperation between school and enterprise will remain superficial. There are more words rather than actions and real cooperation is in short supply and unsustainable. This leaves the breadth, depth and effect of cooperation below expectations. China's cooperation modes among technical-vocational colleges, industrial enterprises and government agencies contrasts with that achieved in Germany.



Case: Germany

Germany has a full integrated system that supports extensive dialogue and cooperation between vocational education and industrial enterprises. Without it, the Dual-Track system would be weak and Germany would not be a world leader in TVET. Many countries have learned from the German model of TVET cooperation, including neighboring Austria, Switzerland, and Slovokia, but also a number of other countries in other parts of the world. A five country Peer-Learning Arrangement of bilateral cooperation promotes the model of TVET cooperation with the active encouragement and support of the German government (Federal Institute for Vocational Education and Training [BIBB], 2018).

A key indicator of cooperation in Germany is that technical-vocational training funds, venues, facilities and trained instructors are provided almost entirely by enterprises. Enterprises enter into training contracts with students, and pay students a training allowance. To prevent abuse, the behaviors of enterprises and TVET institutions are constrained by elaborate legislation related to the Dual VET system.

Among the relevant legislation that helps to formalize the cooperation between industrial enterprises and TVET are laws such as the Law of Vocational Education, Protection Laws of Youth Labor, and Laws of Labor Promotion. There are also specific types of regulations for different industries which specify the obligations of enterprises, qualifications of trainers, and procedure of training. The government acts as a bridge between enterprise and vocational schools, and shares some expenses with employers.

The government has a key role between TVET institutions and employers in the Dual Track System. It sets up the legal framework and delegates the authority to all relevant groups, including local chambers of commerce, employers, labor unions, and related government departments. Most important, the government must act inclusively to ensure that everyone has open access to TVET, regardless of their prior qualification.

Lesson 1 for Gansu

Germany's Dual Track system works because of the incentives for cooperation between employers and TVET schools and colleges. These incentives provide lessons for Gansu. However, merely copying them would be less effective than borrowing the orientation and spirit of the German TVET experience.

This means paying more attention to the interests and demands from cooperative enterprises by providing them with the incentive to be able to recruit graduates in partner schools but also by allowing them to admit students into partner schools before graduation as apprentices. Government can also help by provide clear laws, policies and regulations on tax reductions, financial support, preferential policies, and financial subsidies. Government may even consider guiding the banks to develop diversified financing products that spur TVET institution-enterprise cooperation. Like Germany, Gansu can also bring enterprises into a closer relationship with TVET institutions by making it possible for enterprises to build a part of their production line on campus and hire candidates as both students and workers under the dual management of TVET institutions and enterprises. Gansu can also explore the German model of TVET-enterprise cooperation but with a diversified scheme, whereby a shareholding model of mixed ownership is established. Finally, Gansu can adapt the Germany spirit of corporate social responsibility.

Gansu's state-owned enterprises can take a lead in this respect by strengthening supervision of corporate participation in the TVET-enterprise cooperation. The party committees of Gansu can formulate evaluation procedures, and regularly recognize and honor enterprises which actively participate in cooperation with TVET institutions.

Difficulty 2: low participation in apprenticeships

There is low student participation in the apprenticeship system in Gansu. The enterprises have not yet acquired the right to recruit and employ apprentices. This discourages them from participating in apprenticeship programs. The absence of laws that protect apprentices also limits the enthusiasm of the vocational education students to join apprenticeship schemes. There are 17 vocational education schools and colleges that served as experimental units for adopting a modern apprenticeship system in Gansu. After visiting these enterprises and discussing with certain teachers and students, several obstacles hindered implementation of the modern apprenticeship system. The imbalance between curriculum specialties and the industrial structure lowered the competency of students to perform their work. Because enterprises are limited in their entitlement to recruit, employ, and cultivate apprentices, they are discouraged from investing in apprenticeship programs. Unlike the German apprenticeship system whereby apprentices are employed first by enterprises before their joint training by enterprises and TVET institutions, students in Gansu are recommended to the enterprises by the TVE schools and colleges. Enterprises also have a certain anxiety regarding labor contracts that involve students under 18 years of age because it violates the Labor Law in China. In fact, Gansu TVET student lack protection because apprenticeships risk becoming a tool for enterprises to hire students as cheap labor. When student apprentices are not looked upon as employees the apprenticeship becomes fake in character. Success requires joint efforts that include education departments, human resources and social security departments, economy and information technology departments and financial departments at all levels. The Gansu education department can take more of a leading role in setting up and supporting experimental pilot units. This is hard to carry out without effective communication and cooperation across various agencies and enterprises.

Case: Germany

For the German TVE students, an apprenticeship begins with a search for information on local employers who offer vocational education and training. After locating a local company that offers a training place, the student makes a formal application to the company. For the employer to hire a trainee apprentice, the company must first acquire a certification to provide training. With the certificate, the company is able to offer a training opportunity, initiate a fair assessment of potential trainees, and make a final selection of a trainee. This system produces a high level of motivation on the part of students about their education and training.

With respect to apprenticeships, Germany never hesitates to make major financial investments and protect the legal rights of apprentice trainees. The German economic model has been strengthened by its large number of well-trained employees. This is



done by the Dual Track system. The Dual TVET system is a pillar of Germany's performance as a global industrial power. About half or more of young Germans graduate from Dual TVET apprenticeships. Once they graduate, most are offered long-term employment at the company where they did their apprenticeship. A key feature of apprenticeship system is the contract - a formal agreement between trainee and company that is registered with the local chamber of commerce. The contract sets the start, finish, and time duration of the training to be received. It also sets the vacation time and terms for termination of the training. Finally, the contract includes the content of the training and training financial allowance. In the Dual TVET system, the industrial enterprise has about two-thirds of the responsibility for the students while the school has the other one third. Systematic training occurs under real life conditions. The school offers lessons in both vocational and general education, and it does this free of charge.

The main feature of the Dual TVET system is collaboration between companies and publicly funded vocational schools. Students usually spend periods of time a vocational school and another period in companies. Dual training often lasts two to three-and -a-half years. German students spend half of their time in government-funded classrooms where they learn the theory of their trade. The other half is spent as an apprentice on-the-job for training. They are supervised by qualified mentors at a particular company and receive a monthly stipend. The administrative responsibility is with the host company. Finally, parents are more involved in visiting the workplace to observe the work environment and working conditions for their children so that they can rest assured their children will apprentice in a clean, healthy, and safe environment.

Lesson 2 for Gansu

The German case provides Gansu has an opportunity to make major steps toward a modern apprenticeship system. Industrial enterprises in Gansu can be offered attractive incentives to work more closely with TVET institutions to build a Dual Two Track Apprenticeship System. They can require industrial enterprises to ensure that student learn the knowledge and skills that are recognized by TVET schools, colleges, and government certifying agencies. Apprenticeship rights can be more clearly specified and protected by the appropriate government agency. A formal agreement between trainee and company can be registered with the local authorities. Enterprises can offer a training opportunity, initiate a fair assessment of potential trainees, and make a final selection of a trainee.

Difficulty 3: inadequate teaching staff

The teaching staff remains inadequate in developing Gansu's TVET. Specialized teacher numbers are insufficient. Gansu TVET cannot succeed without a sufficient number of qualified teachers who can enter enterprises while more corporate personnel enter TVET campuses. Dual qualified teachers are needed to teach and train students in both schools and industries. TVET requires a higher number of 'dual-qualification' teaching staff, but the proportion of 28.43% is too low in secondary vocational schools. A proportion of 30% is recommended by the Ministry of Education. The current teaching force has adequate theory but inadequate practical experience. There is also an overuse of external teachers who drain school funding and negatively affect the identity and treatment of the teaching force.

Case: Germany

Germany invests heavily in the training of its TVET teachers. At German vocational schools and colleges there are two categories of teachers: teacher who have responsibility for theoretical teaching, called vocational school teachers; and, specialist practice teachers, called specialist teachers. Vocational school teachers have a university or an equivalent degree in a subject area. Specialist teachers do not need a degree, but have a professional background as a master or specialist in industry or in a craft area.

Germany's TVET teachers must engage in continuing education that takes place at seminars in state institutions for the continuing education of teachers. Specialist Practice teachers have their requirements set by the enterprise and regulated by the Vocational Training Act and the Ordinance on Trainer Aptitude. Trainers have to pass a final examination that corresponds to their job but they must also possess working pedagogic knowledge.

Lesson 3 for Gansu

Gansu has many strong teacher training colleges and universities. However, there has been an under emphasis on the preparation of personnel for TVET and TVET related. The German model offers a way to build a qualified teaching force who can enter enterprises and find a way to attract more corporate personnel to enter TVET schools and colleges. Such a system for Gansu needs to be guided and regulated by a revised Vocational Education Law. Gansu should increase the proportion of 'dual-qualification' teaching staff in higher and secondary vocational schools to above 40% and 45% respectively by 2020. In this way, Gansu can move closer to a modern TVET system that integrates academic education and non-degree education, and balances the secondary and higher vocational education.

Challenge 4: insufficient quality of employment

The quality of employment for graduates of Gansu TVET organizations is a major issue. TVET is not attractive and its social recognition is low. The employment rate for TVET graduates is poor as are the starting salaries and working conditions of graduates. Most graduates are employed by private enterprises but these forms provide poor wages and benefits, low employment stability, and few opportunities for professional development.

Case: Germany

Germany's Dual Track System's success hinges upon making sure TVET is practiceoriented and highly responsive to the needs of the labor market and its changing workplace. It also institutionalizes career guidance. Dual Track TVET standards are based on the requirements of the workplace and provide the stimulus for continuous modernization of the Dual TVET standards. Employers identify new work requirements,

and the social groups and government negotiate the new work standards for training. The vocational schools update their curriculum with the new standards. In short, the standards are demand-driven from both industry and the schools/colleges. Company standards are coordinated with the school standards. The company standards define vocational education standards through the curriculum framework. The standards include a set of competencies for training that fit a job – an occupational profile. The standards also guide how a company teaches about a particular occupation – a training standard. What a trainee needs to know in order to pass the examination is called the examination standard. The vocational education standards include the learning objectives and content. These are organized into fields of learning which form the basis for vocational subjects taught in the vocational school. Vocational subjects in school also provide the vocational theory needed for working in a given occupation.

Lesson 4 for Gansu

There are three important lessons here for Gansu TVET. It can develop a company-based training model that improves training content standards, and strengthens corporate social responsibility. A company based training model will ensure that there is a closer alignment between the skills needed by a particular enterprise. Training and content standards provide the specificity needed to ensure a high degree of external efficiency. Corporate responsibility will bring a new dimension to the Gansu TVET development. Gansu can institute more of a self-regulating business model that will make enterprises much more socially accountable, to itself, but also to the people fo Gansu. By practicing corporate social responsibility, enterprises will be more aware of the impact they have on the society, the economy, and the upgrading of skills for the labor market.

Difficulty 5: scarce partnering for quality standards

In order to strengthen the economy and living standards of Gansu's large population, higher quality learning standards are needed in Gansu TVET schools, colleges, and enterprises. For good reason, the central government has made quality a top priority for 2020 in all aspects of life, health, society, work, and technology. To reach a higher standard, Gansu must build strong partnerships.

Case: Germany

The German government does this by ensuring measurable results. It takes an intermediate role between TVET organization and industrial enterprises and is able to convince industry that their future profitability and innovation depends upon building long term strategical partnerships for quality assurance with all the organizations involved. The business community, social partners and government are all involved in Germany's TVET quality assurance. This also includes the local Chambers of Commerce. They assess and certify companies and trainers for in-company training; monitoring incompany training (facilities, instructors, etc.); help companies find trainees and registering training contracts; organize interim and final exams; and mediate disputes between trainees and companies. Government provides finance; supervises and monitoring the TVET institutions: TVET research; and Dual TVET standards.

Germany develops uniform standards controlled by examinations that lead to a VET Certificate that is nationally recognized. An Examination Board is composed of representatives of employers, employees, vocational school teachers. The Board both assesses and grades the trainee. The examination itself is organized by local Chambers of Commerce. The advantage of this system is that the Dual VET Certificate can be used in three different labor markets. It can be used to secure a position with the company that provides an apprenticeship. It can also be used to acquire a contract with another company in the same field of the apprenticeship training. With a Dual VET Certificate, a graduate can also go anywhere in Germany to apply for a contract with any employer in a different occupational field. Alternatively, after receiving the Dual Certificate, the trainees can defer employment and continue their education in either higher education or vocational training anywhere in Germany.

Lesson 5 for Gansu

Gansu can strengthen its dual track TVET system with examination boards composed of representatives of employers, employees, and TVET personnel. It can ensure that chambers of commerce or equivalent local units monitor quality and administer certifications that reach national skill standards. This will help to make TVET certification more attractive to students and their families by providing recognition in local and national labor markets, and as an entrance point into higher education. Gansu's leaders in education, industry and government need to establish and support operational groupings that that leverage their combined knowledge of labor markets, skills, pedagogy and students for higher quality TVET standards. To do this, Gansu needs intermediary groups are essential to facilitate partnerships between TVET schools, colleges and industrial enterprises with government as intermediary in order to ensure the success of partnerships for quality assurance.

Challenge 6: unfocussed strategy for poverty alleviation

Poverty alleviation is an especially challenging issue for Gansu, a province with a high number of nationally and provincially classified poverty counties. Gansu also has a large population of ethnic minority counties with diverse groups, including Tibetan, Mongol, Hui, Salar, Baoan, Yugur, Tu and Dongxiang. Much of Gansu's poverty is in ethnic minority areas. A related difficulty is access to TVET by girls and women. A limited market for vocational school graduates makes it less attractive to students in poor areas. More investment is necessary in poor communities of Gansu.

Case: Germany

Germany, as the largest destination in Europe for migrants of different cultural backgrounds, has some useful experience for Gansu with its diverse cultural mosaic of ethnic groups. Most of Germany's economic migrants, political refugees, and war refugees are poor. Of the 82 million people living in Germany, roughly one in every eight is a foreign national. More people with foreign citizenship live in Germany than ever before. There are also 1.6 million people seeking asylum, mainly from Middle Eastern and African countries, who entered Germany since 2014. It is critical that the children of these migrants get access to education, including TVET. Studies confirm that youth with an immigrant background have lower chances of entering VET (Diehl, Friedrich, & Hall, 2009, Granato, 2014; Hunkler, 2010, 2014; Skrobanek, 2009). Therefore, the German government is making an extensive efforts to address this. In a report addressed to immigrant parents, Prof. Dr. Johanna Wanka, Federal Minister of Education and Research said: 'Today, with skilled workers needed more than ever, anyone in Germany who completes vocational training has good chances of finding an attractive job.' https://www.bmbf.de/upload_filestore/ pub/Elternratgeber englisch.pdf. As one immigrant from the Middle East said: 'I am convinced of the advantages of the Dual Vocational Training System.' The German government has specific guidelines to help migrant families for their children's education. These include the following: Keep an eye on your child's marks; The better the schoolleaving certificate, the better your child's chances of securing a training place; Attend parent-teacher conferences and parents' evenings where information on the subject of career choice is often provided; Discuss the possibilities and opportunities that prevocational placements offer for finding the right occupation; and Accompany your child to information events such as training fairs. The Germans government also tells migrant families that their ethnic origin is an opportunity by scoring points with bilingualism to gain employment with the government. Poor young people of all nationalities are provided with information about a wide variety of training options at a website (www.wirsind-bund.de). Finally, the German government has immigrant organizations founded by immigrants that assist individuals with their integration into working life and also advises youths on how to make the transition to vocational training. The KAUSA service agencies (Coordination Agency for Training and Migration) provide information and guidance on dual training to self-employed persons, to young people and parents from a migrant background and to young refugees with good prospects of being able to remain in Germany. (www.kausa-servicestellen.de)

Lesson 6 for Gansu

With respect to poverty alleviation, the contrast between Germany and Gansu could hardly be more different. However, both are dealing with ways to integrate diverse cultural and income groups, including girls and women, into the workforce with skill training and vocational education. Among the ways that Gansu can adapt practices for Germany is: First, provide web based information about TVET opportunities to all young people of ethnic nationalities. Eight out of ten Chinese access the internet on their mobile devise and that number grows by the day. Second, appeal to parents to become more involved in their children's vocational education, and ensure that TVET institutions become more parent-friendly and open to parental communication, especially with lower income groups. Government must act inclusively to ensure that everyone (rural or urban, ethnic minority or Han, men and women) all have open access to TVET, regardless of their prior qualification. The Government should provide the unemployed and disadvantaged with access to TVET opportunities, especially disabled members of the community. TVET programs can be built around the traditional craft industry of Tibetan, Yugur, and other minority groups. There is a great deal of support needed for TVET in poor areas, including curriculum, teaching methods, and a long-term mechanism for skills training and more investment beyond only hardware facilities and equipment.

Conclusion

International cases point to useful lessons for Gansu TVET. Gansu's economic structure demands more highly skilled workers for its labor market. The acceleration of technological innovation and growing economic interdependencies within and beyond China's border calls for closer and more effective strategic planning for improving TVET cooperation with industrial enterprises.

Gansu's leading industrial enterprises can take more of a lead in TVET. It is in their own interest to take on a greater commitment and corporate responsibility to train future workers. The success of the new Dual Track System depends on the government taking an intermediary role to facilitate cooperation between vocational schools and colleges, local chambers of commerce, and different kinds of industrial enterprises and businesses. Government can help to form councils composed of competent representation of employers and groups that protect worker's training interests. To raise the standards of TVET requires a broad consensus and cooperative engagement among all social forces. Therefore, government has a regulatory role to ensure the enforcement of the Law of Vocational Education, and to ensure the competency of TVET teachers and trainers in both schools and industry. In short, government has to steer the agencies that assure the quality of TVET.

The German case show the importance for having TVET development engage deeply with the market economy. For that to happen, market reforms must continue to deepen and the private (minban) sector should be encouraged to take more of an initiative. The case of TVET in Germany make it clear that the government has a role to play in macro policy and coordination, but the private sector has an equally important role. It can outperform government when it comes to engaging with and remaining attuned to the changing demands in a market economy. About 60 percent of China's economy is private. Yet, Gansu has virtually no private TVET. The German case show that an open market economy is essential for industry to be a serious and significant stakeholder in TVET. That is not the case at present. Private businesses may be concerned about the risks of engaging with the more bureaucratic and slow moving mechanisms of government. The international cases further confirm that the private sector is pivotal. Massification of higher education would be untenable without private colleges and universities (Lo, 2017). Hundreds of private colleges were established to meet the growing demand. While many initially remained relatively weak, they did relieve financial pressure on the government and provided more opportunities for those who could not score high enough to enter top tier public colleges and universities.



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